Archives of Dermatology and Syphilology

VOLUME 52 JULY 1945 NUMBER 1

COPYRIGHT, 1945, BY THE AMERICAN MEDICAL ASSOCIATION

A TROPICAL LICHEN PLANUS–LIKE DISEASE

LIEUTENANT COMMANDER JAMES W. BAGBY, MC-V(S), U.S.N.R.

Since the beginning of the war there have appeared on some tropical islands of the Pacific numerous cases of a disease which in its clinical appearance is suggestive of lichen planus. The total number and the percentage of personnel affected are impossible to estimate. That the number is large is obvious in this west coast Naval Hospital, which receives nearly all its patients directly from overseas. In the last eight months of 1944 about 25 cases of this disease have been observed here, 20 of them in the last three months.

According to the histories obtained, some of these eruptions begin as true lichen planus. In others, a generalized erythematous eruption, usually diagnosed as an exfoliative dermatitis, is followed by localized patches of the disease under consideration. In still others large areas of pustules develop, thought to be secondarily infected miliaria or impetigo, which in healing are replaced by lesions resembling hypertrophic lichen planus.

The distribution is usually generalized, with the extremities showing the heaviest involvement. In several patients the midportion of the trunk was strikingly free of lesions. In 1 of them the area of skin protected by a wristwatch and its band was free of involvement, although the entire forearm and hand were affected with the lesions of the disease. The face is usually involved. Several patients have had scarred patches in the scalp, producing what is apparently a permanent alopecia. Thickened grayish white patches on the tongue and oral mucosa are commonly though not invariably observed. I have seen no involvement of the glans penis, although the shaft and scrotum are involved in some. Hypertrophic lesions on the palms and soles are common, as are thickening, separation, ridging and discoloration of the fingernails and toenails.

Active lesions consist of papules and confluent papules and nodules. These are covered with a heavy, grayish, warty, adherent scale. When this is removed, the underlying area bleeds and has a brown to purple color. With regression of the disease the involved areas vary from those which are lightly pigmented a brownish color to atrophic, depressed, deeply pigmented scars. The tongue and oral mucosa, when affected, do not improve with the remainder of the eruption. In the initial stages of the disease itching is usually present, and in a few patients this was described as severe. It is not as prominent a complaint as in the usual patient in the United States with typical lichen planus.

The 5 men whose cases are reported were admitted to this hospital from overseas on the same day.

REPORT OF CASES

CASE 1.—C. I. W., a 45 year old white man, had been in the tropics for four months prior to the onset of the disease. When the eruption began, he was on Bougainville. He had previously been on Guadalcanal, having arrived there directly from the United States. An attack of malignant tertian malaria had subsided after treatment with quinine and quinacrine hydrochloride a week before the skin became involved. Lesions appeared first on the flexor surfaces of the wrist and on the buttocks, and in a period of five months they spread to the thighs, legs, arms and forearms almost solidly, with scattered areas of papules on the trunk and in the scalp. These became thickened, scaly and at times moist. Treatment overseas consisted of injections of a bismuth preparation and an arsenical, with solution of potassium arsenite administered by mouth. While he was en route to the United States, and after his arrival here the hypertrophic areas improved rapidly without further treatment. He lost no weight and considered his diet adequate.

On examination the skin was rough and dry over the areas formerly affected. Many darkly pigmented atrophic scars remained over these areas. In the scalp they persisted as scars in which there was no hair. On the forearms and ankles several hypertrophic actively pruritic areas were present. These were either nodules or large elevated plaques, up to 5 cm. in diameter, with a dry horny surface. The palms, soles and oral mucosa were not involved. There were no signs of vitamin deficiency.

Biopsy from a lesion on the forearm which appeared clinically active showed moderate hyperkeratosis, most evident near the outlets of the oil glands. There was moderate acanthosis. The rete pegs were shortened, and the basal layer of cells was absent or indistinct. The upper portion of the cutis was composed of young connective tissue. This contained a sharply demarcated layer of infiltrate, composed predominantly of lymphocytes but with neutrophils and plasma celis present.

CASE 2.—M. V., a white man aged 27, had been in the tropics for two months and had gone directly to New Guinea from the United States. In that time he had taken one tablet (0.1 Gm.) of quinacrine hydrochloride

This article has been released for publication by the Division of Publications of the Bureau of Medicine and Surgery of the United States Navy. The opinions and views set forth in this article are those of the writer and are not to be considered as reflecting the policies of the Navy Department.

daily. He had lost 15 pounds (6.8 Kg.) in weight and had considered his diet poor in quantity and quality.

The eruption first appeared on the ankles and the dorsa of the hands. Within a few weeks it spread over almost the entire body. Areas unaffected by papules and nodules were erythematous, and the itching was intense. He was given three injections of a bismuth preparation and treated with local applications, without benefit. On the return trip to the United States the lesions began to clear rapidly.

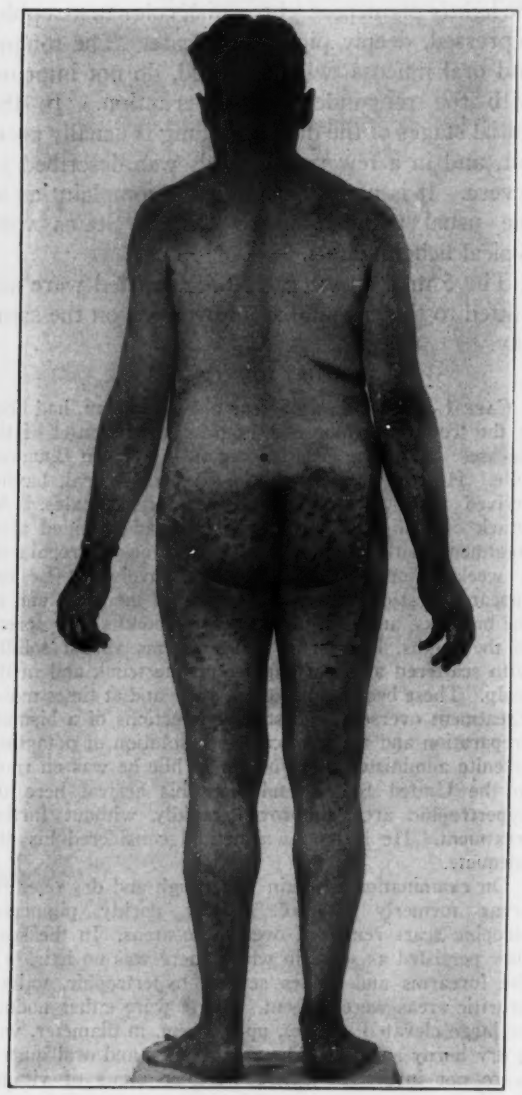


Fig. 1 (case 1).—Generalized lichen planus–like eruption, sparing the trunk.

On examination the patient presented numerous purplish to dark brown macules scattered over the entire body, including the scalp, palms and soles. Leukoplakia-like patches were found on the dorsum of the tongue. The remainder of the oral mucosa was free of eruption. Active hypertrophic nodules and plaques remained on the forearms, on the dorsa of the hands and on the ankles. There were fissures at the angles of the mouth but no other signs or symptoms of avitaminosis.

Biopsy from a lesion on the forearm showed moderate hyperkeratosis. The epithelium was decidedly atrophic, with complete disappearance of the rete pegs. Loose connective tissue composed the papillary and subpapillary layers, and this was diffusely infiltrated with lymphocytes and plasma cells. The lower border of the infiltrate was sharply demarcated. Many cells contained phagocytosed pigment.

Case 3.—M. C. O., a 42 year old white man, had been in the tropics for fifteen months prior to the onset of his disease. He was at first stationed in the New Hebrides and in New Guinea, but he had been in the Admiralty Islands six weeks when the eruption began. For the previous six to eight months he had taken one quinacrine hydrochloride tablet daily. He had lost no weight and had considered his diet adequate. The eruption first appeared on the wrists and ankles, and in a few weeks it had spread generally, accompanied with severe itching. He received local medication only and improved rapidly on the way home.

On examination there were fissures at the angles of the mouth but no other signs of vitamin deficiency. Deeply pigmented atrophic scars were dispersed over the cutaneous surface except on the face, scalp and soles. The back, abdomen and chest showed fewest lesions. The oral mucosa was normal. The arms, forearms, thighs and legs showed almost complete involvement. On the forearms, legs and ankles there remained active raised lesions covered with a rough horny surface. These were up to 3 cm. in diameter.

Biopsy from a lesion on the forearm showed some hyperkeratosis. There were thinning of the granular layer and partial atrophy of the rete pegs. The basal cell layer had disappeared. The upper portion of the cutis was composed of vascular granulation tissue. In this area, sharply limited at its lower border, there was a moderate infiltrate of lymphocytes, plasma cells and neutrophils. Some of the macrophages contained phagocytized pigment granules.

Case 4.—T. J. M., a white man aged 44, spent three months in New Guinea and then was transferred to the Admiralty Islands, where one month later the eruption began. He had taken 1 quinacrine hydrochloride tablet daily. During this time he had lost 25 pounds (11.3 Kg.) in weight and considered the quality of his diet poor.

His eruption appeared first on the calves as a pustular eruption which soon spread to the remainder of the body. As the pustules dried, they were replaced by thickened red to purplish papules and nodules, which itched moderately.

Treatment consisted in the use of local applications and the ingestion of vitamin capsules of unknown content. En route to the United States and afterward most of the eruption improved rapidly, leaving pigmented areas, and the itching ceased.

On examination there were no changes indicating a vitamin deficiency. He presented thinned pigmented areas up to 2 cm. in diameter, most noticeable over the upper part of the back, the chest and the buttocks. Involvement of the face and eyelids was slight. Active confluent hypertrophic nodules and plaques, of a dark red color with a white to grayish scale, were present on the forearms and arms, on the dorsa of the feet and on the dorsal and palmar surfaces of the hands. On these areas there were also scattered, small, discrete and confluent flat-topped papules, angular in outline and red to purplish in color, with central umbilication and white striae. The lesions were typical of lichen planus. The tongue and oral mucosa showed numerous areas characteristic of lichen planus in that region.

Biopsy of a section from a regressing lesion on the forearm showed hyperkeratosis. The granular layer

was decidedly thinned. Atrophy of the rete pegs and liquefaction degeneration of the basal cell layer were noted. The papillary and subpapillary layers were represented by vascular granulation tissue. These layers contained focal collections of lymphocytes and some plasma cells. Similar collections were found deeper in the cutis.

CASE 5.—W. C., a white man aged 47, had been in the tropics nineteen months when the eruption started. Most of this time he had been in the New Hebrides. He had then spent one day ashore in New Guinea and had last been in the Admiralty Islands for five and a half months. He had taken 1 quinacrine hydrochloride tablet daily and had lost no weight. Several months previously he had had an attack of dengue. The eruption began on the hands and fingers and then spread generally. At first it appeared as typical papules of lichen planus, later becoming thickened, and confluent and forming a grayish dry scale. There was only slight itching. It began to clear on the patient's return to the United States.

Fig. 2 (case 4).—Generalized lichen planus-like eruption (in places, of hypertrophic type) sparing the midtrunk.

On examination there were no abnormalities except those of the skin. Pigmented macules were scattered over the face, including the eyelids, and on the chest, hands, buttocks, legs and soles. Most of the areas faded in color and cleared completely during two months of observation.

Fig. 3 (case 4).—Diffuse scaly patches on the forearms.

Fig. 4 (case 4).—Hypertrophic lesions on the legs.

Biopsy of a specimen from a slightly thickened plaque on the forearm showed moderate hyperkeratosis with plugging of hair follicles. There was acanthosis in some areas but thinning of the granular layer in others.

Atrophy of the rete pegs and partial disappearance of the basal cell layer was noted. The papillary and subpapillary layers were represented by young connective tissue containing a cellular infiltrate which was sharply demarcated at the lower border. This was composed principally of lymphocytes and plasma cells. A few neutrophils were present. There was much phagocytosed pigment in the macrophages.

All 5 men were in good mental and physical condition at the time of examination. Roentgenograms of their chests were normal except for T. J. M. (case 4), who showed evidence of a calcified Ghon tubercle and effects of previous inflammation of the base of the right

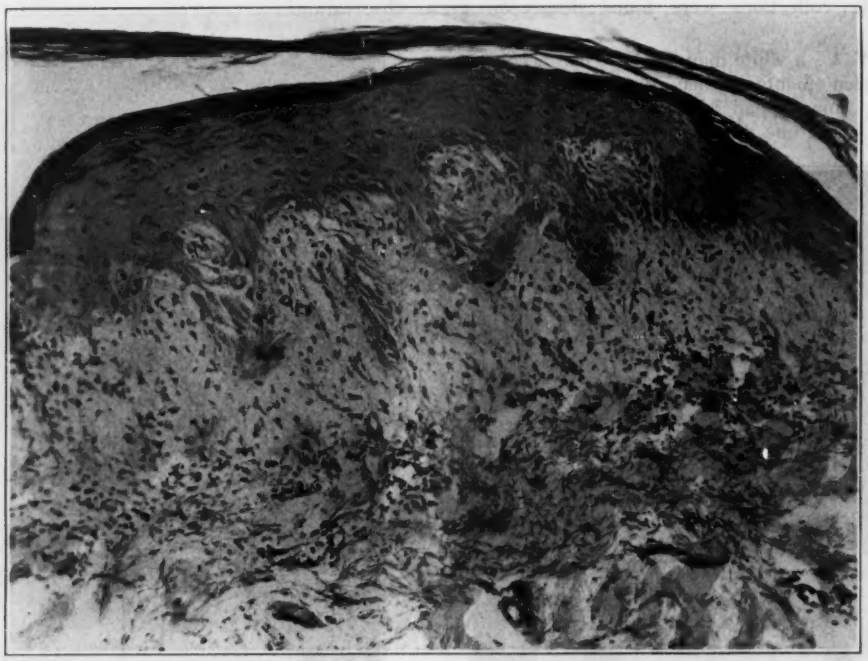


Fig. 5 (case 3).—The histologic structure of lichen planus is satisfactorily shown, although the lymphocytic infiltration in the corium is scanty.

Fig. 6 (case 4).—The histologic structure is compatible with that of lichen planus, though the corium is rather scanty.

pleura. The sedimentation rate was high only in M. C. O. (case 3), who had a rate of 17 mm. per hour. The Kahn reaction was negative, and the urine was normal on repeated examinations for all the men. Complete blood counts revealed no abnormalities of the red or white cells, in the hemoglobin or in the differential percentages.

Dr. Hamilton Montgomery, of the Mayo Clinic, examined the sections. He stated that "they were consistent with what has tentatively been labeled 'New Guinea lichen planus.'" He had examined numerous histologic sections from persons with the same disease from other sources and was of the opinion that it is a new clinical entity, in that features of eczematoid dermatitis or exfoliative dermatitis are mixed with those of lichen planus, while in ordinary lichen planus one never sees "eczema" associated with the process.

Dr. Zola Cooper, of the Barnard Free Skin and Cancer Hospital, St. Louis, thought that the sections fitted the microscopic picture of lichen planus. She stated that "all the slides show the hyperkeratosis, the acanthosis with distortion or flattening of the rete pegs, which is characteristic of lichen planus. Four of the 5 patients showed some liquefaction degeneration of the basal layer. In all of them there was a lymphocytic infiltrate in the upper third of the dermis and an increase in chromatophores in this region. There was dilatation of blood vessels in the papillary portions of the dermis."

COMMENT

All the affected personnel coming to my attention have been shore-based. The greater number of cases have developed in the New Guinea area, but 2 patients of my series had not been in New Guinea, and 1 patient had spent only one day ashore on the island.

Most of these men had lost weight before the eruption began. A few showed signs, or questionable signs, of vitamin deficiency. Loss of weight and distaste for the rations provided are, however, complaints common to nearly all troops in the tropics.

Although 4 of the 5 patients were in their forties, the disease has been observed in a number of men in the third and fourth decades. The youngest patient seen was 18 years old. I have seen no Negroes with this disease.

Nearly all had received treatment. Local applications, solution of potassium arsenite, injections of a bismuth preparation and oxophenarsine hydrochloride were used singly or in combination on various members of the group with possible benefit in some. Nearly all showed improvement en route to the United States and after their return.

Dietary deficiency and toxicity of or sensitivity to quinacrine hydrochloride have been suggested as possible causes of these eruptions. I feel that additional factors are involved, for the following reasons:

1. Several men with lichen planus were seen in the eastern part of the Solomon Islands in 1943, but none with this atypical form was observed. Many more cases of this eruption have appeared in 1944 than in 1943, though the administration of quinacrine hydrochloride and the dietary allotments were the same for both years.

2. Various forms of lichen planus had been observed long before quinacrine hydrochloride came into use.

3. I have administered quinacrine hydrochloride to 5 men nearly well of this disease, giving each three tablets daily for four days, (admittedly a short trial) without causing a flareup of their lesions.

4. The eruption has none of the features usually associated with dietary deficiencies or with drug eruptions.

5. The disease has appeared in men who had been in the tropics for only two or three months, in which period it is not likely that severe avitaminosis would occur.

SUMMARY

Numerous cases of a disease which clinically and histologically resembles lichen planus have appeared recently in the tropical islands of the Pacific Ocean. In nearly all cases there is a striking similarity in severity and in widespread involvement of the skin. It is doubted that toxicity of or sensitivity to quinacrine hydrochloride or dietary deficiencies are the only causes, and it is believed that further investigation will show that some unusual combination of factors is necessary to produce this disease.

ARMY AIR FORCES DERMATOLOGY PROGRAM

LIEUTENANT COLONEL J. R. SCHOLTZ

MEDICAL CORPS, ARMY OF THE UNITED STATES

Through the foresight and vision of Major General David N. W. Grant, the Air Surgeon, and of Colonel William P. Holbrook, Chief, Professional Division, Office of the Air Surgeon, a dermatology and syphilology branch was established in the Office of the Air Surgeon, Headquarters, Army Air Forces, in August 1944. It was recognized that diseases of the skin represent an important problem in medical care, as indicated by the case load, both in outpatient dispensary care and in Army hospitals, causing disability and time lost from duty. It was further recognized that as American armed forces began operating in increasing numbers in overseas theaters, particularly in the areas of the Pacific and the Orient, cutaneous diseases would become increasingly prevalent and of increasing importance, both from medical and from military standpoints.

Examination of available data revealed that for the entire Army in the continental United States during the year 1943, the over-all admission rate due to cutaneous diseases was 39.6 per thousand. This included only persons actually admitted to hospitals or quarters; in other words, patients disabled and off duty because of skin diseases. The average time lost per patient admitted was thirteen days. Seventy-two and five-tenths per cent of all admissions for cutaneous diseases were accounted for by the following conditions: (*a*) pyogenic infections, including cellulitis, (*b*) superificial mycoses, (*c*) dermatitis venenata, (*d*) scabies, (*e*) acne vulgaris, (*f*) verruca vulgaris, (*g*) miliaria and (*h*) various unclassified dermatitides.

It is variously estimated that the number of persons with cutaneous diseases who are treated while on duty is from two to three times that of those admitted to hospitals or quarters.

FUNCTIONS OF THE DERMATOLOGY AND SYPHILOLOGY BRANCH

The functions of the dermatology and syphilology branch, Office of the Air Surgeon, are as follows:

1. Establishment of dermatologic services in A.A.F. regional hospitals;
2. Development of dermatologic consultation services for A.A.F. station hospitals;
3. Achievement of optimum use of specialist personnel now with the A.A.F.;
4. Formation of a consultative and preventive program for civilian employees of the Air Technical Service Command;
5. Development of a teaching program for residents and general service medical officers;
6. Accumulation and analysis of data concerning morbidity, time lost from duty through hospitalization and "sick call load" due to cutaneous diseases;
7. Reduction of morbidity, time lost from duty and "sick call load" through improved professional care and administrative practices;
8. Coordination and development of clinical studies in those cutaneous diseases which are of particular significance in A.A.F. personnel by virtue of the type of duty or the geographic location;
9. Establishment and maintenance of progressive treatment practices in the clinical management of syphilis and other venereal diseases occurring among the military personnel of the A.A.F.;
10. Inspection of A.A.F. hospitals and medical installations and evaluation of the quality of the tologic service.

PERSONNEL

At the time the branch was created there were twenty-two medical officers classified as dermatologists in the A. A. F. in the continental United States. Sixteen of these were certified by the American Board of Dermatology and Syphilology. Others, although not certified, had received sound training in recognized dermatologic centers and had had several years in civilian practice limited to dermatology and syphilology. Some of these men were already established in a dermatologic service in an A. A. F. hospital, but others were not. At the time of writing a total of thirty-two medical officers have been classified as dermatologists in the A. A. F. in the continental United States. Twenty-two of these men are now certified by the American Board of Dermatology and Syphilology.

FUNCTIONS OF A. A. F. DERMATOLOGISTS

A. A. F. dermatologists now perform the following duties: Each has developed a dermatologic service in the A. A. F. regional hospital in which he is stationed. This service includes a ward for the hospitalization of patients with severe, disabling dermatoses and for the definitive treatment

Headquarters, Army Air Forces, Office of the Air Surgeon, Washington, D. C.

of patients who may be referred from satellite hospitals at which specialized medical care is not available. In addition, each dermatologist conducts clinics for outpatients treated on duty, such clinics being held several times a week or more, depending on the case load.

A. A. F. hospitals in the continental United States are now of two classes: the regional hospitals, which are completely staffed with qualified men in all branches of medicine and surgery and which are designed to supply definitive medical care of all types and to serve as consultation hospitals for a given geographic area and, second, the station hospitals, which are staffed to care for common, uncomplicated diseases and to provide emergency care at the station in which they are situated. The station hospital is limited as regards its specialist staff, and, as now organized, no provision is made for a dermatologist on the staff. Thus, all patients who require a specialist's care are referred to a regional hospital, or a specialist is requested to visit the station hospital. The A. A. F. has recently established a consultation system whereby at least one professional consultant from the regional hospital will visit each satellite station hospital each month. There are now thirty regional hospitals, each one of which serves as a consultation hospital to a number of station hospitals in the general area. A. A. F. dermatologists are participating in the consultation system now established.

A number of dermatologists selected by the Office of the Air Surgeon are carrying on a preceptor type of training for medical officers. The purpose of this training is to indoctrinate medical officers (who are not dermatologists) in the management and treatment of the common cutaneous diseases which are observed in the military service. The training lasts three months, the trainee being assigned to the dermatologic service of a dermatologist certified by the American Board of Dermatology and Syphilology who has had association with a civilian teaching institution. The trainee assists in the management of the ward and the outpatient clinics and visits civilian teaching institutions in the vicinity when these are available. This type of training was established because of the extremely limited number of qualified dermatologists in the air forces and because of the need for large numbers of men who could satisfactorily manage common cutaneous diseases at A. A. F. stations to which no dermatologist was assigned. At the present rate of training approximately fifty medical officers will receive this type of indoctrination each year, and it is believed that a major contribution will have been made to the conservative management of cutaneous diseases in the A. A. F. Some of the men receiving this training may become interested enough to carry their studies further after their return to civilian life and take formal training in dermatology. The training now given in the A. A. F. was not established with the idea that these men would become qualified dermatologists simply by virtue of such training thus received. In the establishment of the program, it was specifically directed that men receiving this training would not be classified as dermatologists on the basis of the training received.

The Air Technical Service Command of the Army Air Forces, which is responsible among other things for the maintenance and repair of aircraft, operates a number of large depots throughout the continental United States in which several hundred thousand civilians are employed. It has been estimated that 35 per cent of these employees are exposed to occupational hazards and to chemical agents which may cause dermatitis. Patients at these depots are served by medical officers trained in industrial medicine, but with few exceptions a trained dermatologist has not been available for consultation. Arrangements have been made for the A. A. F. dermatologists in the general area of these depots to make regular visits to assist in the diagnosis, management and proper classification of cutaneous diseases occurring in the civilian employees. This service has already resulted in more accurate classification of cases and in the evaluation of the role of occupation in the causation of disease. It has also resulted in more prompt return to duty and in shortened periods of disability. It is expected that during the coming years valuable information will be gathered with reference to the occupational hazards of a cutaneous nature encountered in the maintenance and repair of aircraft.

A. A. F. MANUAL ON MANAGEMENT OF CUTANEOUS DISEASES

A study of patients hospitalized for cutaneous diseases in the Army revealed that perhaps 50 per cent were hospitalized as a result of improper early treatment. Furthermore, it was found that approximately 90 per cent of all diseases of the skin occurring in the Army fall within a small number of diagnoses. Because of these facts it was considered entirely practical to publish a brief guide in outline form on the management of the common cutaneous diseases seen in the military service, for use by A. A. F. medical officers, the vast majority of whom had received no specific training in dermatology. It was be-

lieved that if this manual was followed in initiating the treatment of persons seen on an outpatient status, the number of patients aggravated by improper and irritating sensitizing treatment and consequently hospitalized, could be greatly reduced. Accordingly, a brief manual in outline form was prepared by a group of five dermatologists of the Army Air Forces and published as A. A. F. Manual 25-1, subject: "Management of Common Cutaneous Diseases." [1] It has been distributed to all A. A. F. installations within the continental limits of the United States for use in dispensaries and station hospitals. It is not "directive" in nature, and in no way limits the exercise of clinical judgment on the part of the medical officer.

SUMMARY

The dermatology program being developed in the Army Air Forces has progressed along the following lines: Available specialized personnel have been utilized to the fullest extent by placing them in A. A. F. Regional Hospitals, in which they establish dermatologic services and from which they act as consultants to station hospitals in their geographic areas. Selected dermatologists with previous teaching experience and certified as specialists by the American Board of Dermatology and Syphilology are being used to train a number of internists in the fundamentals of military dermatology. A. A. F. dermatologists are being used as consultants in the industrial medical program of the Air Technical Service Command. A manual on the management of the common cutaneous diseases seen in the military service has been published and distributed to A. A. F. installations in the continental United States. A branch of dermatology and syphilology has been established in the Office of the Air Surgeon, Headquarters, Army Air Forces, to initiate, coordinate and develop the program outlined herein.

1. Management of Common Cutaneous Diseases, Army Air Forces Manual 25-1, United States War Department, Washington, D. C., Government Printing Office, October 1944; revised, Dec. 22, 1944.

DERMATITIS FROM DEHYDRATION OF POTATOES

SAMUEL M. PECK, M.D.
Medical Director (R), United States Public Health Service*
BETHESDA, MD.
AND
H. C. CLARE, M.S. (SAN. E.)
Director of Public Health Engineering, Idaho Department of Public Health
BOISE, IDAHO

The dehydration of vegetables is a relatively new industry. In the last few years, because of the needs of the armed forces and of lend-lease for a food with a high caloric value which would occupy relatively little shipping space, there has been a great increase in the number of plants which dehydrate potatoes. Most of the dehydrating plants in the state of Idaho have been in existence for two years or less. The majority of the plants are situated in the great potato-raising regions.

In the last two years, more than 200 cases of so-called potato poisoning or dermatitis have been reported to the Idaho Industrial Accident Board. The United States Public Health Service was requested to investigate the cause of the dermatitis among workers processing the potatoes.

We know of no other published reports of dermatitis from potatoes.

DEHYDRATION PROCESS

Six plants in which the potatoes were dehydrated were investigated. In only one of them was lye used in the peeling process. In this plant, after the potatoes have been washed with water, they are precooked (210 F.), immersed in 10 per cent solution of lye in a lye cooker for five minutes and then peeled by friction in a rotating drum. The washing water in this process finally removes all traces of the lye. In the other five plants, the potatoes are precooked and then peeled by rough rubber rolls or abrasives, no lye being used.

After they have been peeled, the potatoes are placed on moving belts which travel down the centers of long tables. Women workers seated on each side of these trimming tables remove the eyes and the remnants of the peel with special-shaped trimming knives. In this operation, the hands are constantly wet with water and potato juice. In nearly all cases, the dermatitis reported developed among the workers at the trimming tables.

After the trimming operation, the potatoes are cut into small pieces by machine, blanched by steam to destroy the potato enzyme (tyrosinase) and thus prevent discoloration and finally dehydrated in wind tunnels by exposure to air heated to a temperature of 150 to 155 F. for nine hours. The dehydrated potatoes weigh one eighth of their original weight and contain only 3 per cent of their original water content. The final product has a moisture content of approximately 7 per cent.

The plant in which the lye was used for peeling was the largest one visited and had the greatest number of cases of dermatitis. In this plant, and in others, it was the custom, because of the great press of work, for the workers to be employed for seven consecutive days every other week, on eight hour shifts. In alternate weeks they worked six days. This long period of exposure without intervals of rest was an important contributing factor to the dermatitis.

CLINICAL INVESTIGATIONS

Twenty-four women with dermatitis were seen. It took from two weeks to one month for enough discomfort from the dermatitis to develop so that workers either reported to the plant physician or stopped working. In all but 3 of the workers, the dermatitis was limited to the hands. These 3 patients had, in addition to dermatitis on the hands, involvement of other parts of the body, such as arms, legs, scalp and face. In these 3 cases the dermatitis was found to be of nonoccupational origin, namely, atopic dermatitis, dermatophytosis and psoriasis, respectively.

The earliest manifestations of dermatitis from the handling of the potatoes were seen on the hand which grasps the potato in the trimming operation. First to be affected was the skin of the web spaces between the fourth and fifth and the third and fourth fingers. The changes consisted of redness, scaling and, in a few instances, vesicles. As the condition progressed,

*From the Dermatoses Section, Industrial Hygiene Division, Bureau of State Services, United States Public Health Service.

the involvement resembled erosio interdigitalis blastomycetica. The lesions in many instances were not sharply demarcated and extended up the sides of the fingers. There was, in addition, evidence of maceration of the skin on the rest of the hand; the skin of the palm in most of the workers who did not wear gloves showed varying degrees of maceration, such as whiteness and puckering. In many instances this went on to dryness, redness and scaling of the palms, with the formation of fissures in the folds of the skin, especially at the bases of the terminal phalanges, in the more severely affected workers. Involvement of the skin of the dorsum of the fingers was also observed in some of the patients. In a number of instances, the web spaces of both hands were affected; in others, only the skin of the hand grasping the potato was involved. A combination of palmar and web space lesions was seen only in those patients in whom the dermatitis had existed for some time. In no instances did the dermatitis extend above the wrist, and no changes in the nails were seen.

Since the greatest number of cases were observed in the plant in which lye was used to remove the peel, the question naturally arose as to whether enough alkali remained on the surface of the potato to play a role in the cause of the dermatitis. Tests for any alkali remaining on the surface of the potatoes showed that the natural acidity of the potatoes would neutralize any traces of hydroxide which would remain after peeling. Such sound potatoes had a surface p_H of 5.7 to 6. Only in defective potatoes with deep cracks due to rot was the water prevented from completely removing the lye. Such potatoes were not many, since previous inspection removed the rotted vegetables before they came to the trimming tables.

Alkalinity was further ruled out as a contributing cause of dermatitis by the fact that in plants in which the lye was not used similar changes in the skin were also observed.

Patch Tests.—Although it was evident that the dermatitis was due primarily to maceration of the skin from long hours of immersion in water and from contact with the vegetable juice, patch tests were made to rule out the possibility of allergic dermatitis. The patch tests were made with slices of potato, including cooked and uncooked portions, which were applied to the normal skin of the forearm of 12 patients with dermatitis and of 5 controls, that is, persons who did not work in the plant. All of the patch tests elicited negative reactions.

Cultural Studies.—Cultures were made on Sabouraud's medium from the unbroken vesicles and from the margins of the lesions in the web spaces of 6 of the patients. Cultures (identification made by Dr. Emmons) revealed no significant results, with the exception of the isolation of Monilia albicans from 1 patient. Monilia albicans is the organism associated with the syndrome erosio interdigitalis blastomycetica.

COMMENT

It is our conclusion that the dermatitis seen in the processes of dehydrating potatoes is an occupational disease due to the long hours of exposure to water and potato juice which results in varying degrees of maceration of the skin. Secondary invasion by cocci and monilia organisms also play a role in the clinical syndrome.

Proper protection of the skin by ointments and gloves easily prevented the dermatitis. We were able to note this because in a number of the plants visited in which proper protection measures were used almost no dermatitis was seen.

RECOMMENDATIONS AND PREVENTION

1. All workers handling the potatoes, especially those at the trimming tables, should wear rubber gloves. These gloves should be turned and cleaned each day. Employees should also wear impervious sleeves which fasten over the gloves at the wrist. It is advisable that the management furnish one pair of these gloves each month if necessary, because in this way the wearing of gloves can be made compulsory. If at any time the gloves are lost or torn, they should be replaced by the management.

2. Because there are frequent punctures of the gloves by the trimming knives, the workers should apply an emollient ointment to their hands. Care should be taken that it is applied to the web spaces. Thus, if any punctures should occur, the hands would still be protected by a water-repellent film, while the wearing of the gloves would prevent the ointment from contaminating the potatoes.

3. At each rest period, at lunch time and before going home, the workers should be instructed to wash their hands thoroughly in warm water and with a mild soap, or a soap substitute, and to apply the emollient ointment.

4. Those workers in whom dermatitis develops should be carefully supervised in their routine of protection and should be given an emollient cream to take home to counteract further the effects of the maceration of the skin. Patients with chronic dermatitis with involvement of the web spaces should be examined for secondary infection with cocci or monilia organisms. If pathogenic organisms are demonstrated, proper treatment should be instituted.

URTICARIA FROM PERFUME

S. J. ZAKON, M.D., AND J. B. KAHN, B.S.
CHICAGO

Scent, whether organic or inorganic in origin, has a physicochemical basis and is propagated by minute particles. These odoriferous particles are termed osmyls and may act as inhalant allergens. The subject of allergy to scent or to osmyls has received but meager attention, if one is to judge from the few brief references in the literature. Among the authors who have advanced this etiologic conception are Feinberg and Aries,[1] Rappaport and Hoffman,[2] Urbach,[3] Sulzberger and Wolf[4] and Horesh.[5]

That perfumes as contactants frequently cause dermatitis is well known. Downing,[6] Schwartz and Tulipan,[7] and Rattner and Pusey,[8] to mention but a few, have repeatedly called attention to the importance of scented cosmetics as a cause of dermatitis. The role of perfume, however, as an allergen causing chronic urticaria due to inhalation of osmyls has been seldom considered.

A report, therefore, of a case of chronic urticaria of six years' duration due to the use of perfumes is deemed worthy of publication.

REPORT OF A CASE

T. B., a white housewife, aged 45, had been suffering since 1939 from chronic recurrent urticaria. The initial attack consisted of a group of hives on the face, neck, arms and legs. Since that time she had never been free from lesions. At times there were only a few, but at other times the entire cutaneous surface was affected.

During these six years, she was under the care of competent dermatologists, allergists, internists and surgeons. Dermatologic management consisted of injections of histamine or calcium, ingestion of ephedrine and injections of epinephrine hydrochloride. Roentgen ray therapy, ultraviolet irradiation and autohemotherapy were also used to no avail. The allergists made a complete study in their field without any definite results. The internists looked for foci of infection, and both a tonsillectomy and a hemorrhoidectomy were performed in January 1944. After all probable etiologic factors had been considered and ruled out, the patient was told that her hives were due to her neurovascular instability and that she should try to forget about her ailment.

She had had no other allergic symptoms, such as allergic rhinitis, asthma, migraine or dermatitis.

The patient was first seen by one of us (S. J. Z.) on Aug. 15, 1944. After we had listened to her history and had noted that she used much perfume, she volunteered the explanation that the collection and liberal use of perfumes were her hobbies. Not only did she use perfume and scented cosmetics constantly, but a list of the latter revealed forty-eight different perfumed preparations. On every coat hanger, in every garment bag and in every drawer in her dresser, she had sachets.

Routine physical and laboratory examination failed to disclose any pathologic conditions. She was advised to remove all traces of perfume from her clothing, to use unscented cosmetics and to keep away from persons using much scent. She was not given any medication, not even local applications.

On August 23, after one week of living in an atmosphere, free from perfume, her hives disappeared. A week later she reported an attack of hives following a bridge party in a room with forty women who were liberal users of perfume. On September 6, the patient said that she had suffered no further attacks. Later, on September 14, she reported that she was feeling better than she had for years and was free of hives.

On September 21, when the suggestion was made that she use one perfume at a time, in order to find out which one she was sensitive to, the patient refused, saying that she did not wish to suffer the agonies of hives again.

COMMENT

Consideration of the chemistry of the various materials used in the manufacture of perfumes, toilet waters, scented cosmetics and other toilet preparations will rationalize the diagnostic procedure in this case and will be helpful in the diagnosis in other cases in which perfumes act as contact or inhalant allergens.

A finished perfume consists of a solution of perfume oil in 90 per cent ethyl alcohol; a toilet water or cologne contains less perfume oil in

1. Feinberg, M., and Aries, P. L.: Asthma from Food Odors, J. A. M. A. **98**:2280 (June 25) 1932.
2. Rappaport, B. Z., and Hoffman, M. M.: Urticaria Due to Aliphatic Aldehydes, J. A. M. A. **116**:2656 (June 14) 1941.
3. Urbach, E.: Odors (Osmyls) as Allergenic Agents, J. Allergy **13**:387 (May) 1942.
4. Sulzberger, M., and Wolf, J.: Dermatologic Therapy, Chicago, The Year Book Publishers, Inc., 1940, p. 175.
5. Horesh, A. J.: (*a*) Allergy to Odor of White Potato (Irish Potato), J. Allergy **15**:147 (March) 1944; (*b*) Allergy to Food Odor: Its Relation to the Management of Infantile Eczema, ibid. **14**:334 (May) 1943.
6. Downing, J. G.: Cosmetics Past and Present, J. A. M. A. **102**:2088 (June 23) 1934.
7. Schwartz, L., and Tulipan, L.: A Text Book of Occupational Diseases of the Skin, Philadelphia, Lea & Febiger, 1939.
8. Rattner, H., and Pusey, W. A.: Neurodermatitis or Irritant Dermatitis, J. A. M. A. **99**:1934 (Dec. 3) 1932.

the same solvent. In recent years, owing to the shortage of ethyl alcohol, so-called cream and solid perfumes have been marketed. They are emulsions of perfume oils with varying amounts of mineral oils and waxes, depending on whether a liquid, a cream or a solid product is desired.

In scenting cosmetics and toilet preparations, the amount of perfume oil is generally determined by the retail selling price of the finished cosmetic. Usually the more expensive cosmetics contain a larger quantity than the cheaper ones, a fact which undoubtedly explains the more frequent occurrence of allergies to perfume in users of higher-priced cosmetics.

The compounding of a finished perfume oil is an art rather than a science. There remains much to be done in determining the chemistry of the raw materials used. A consideration of these materials will illustrate the complexity of this problem.

As many as thirty different materials are employed to obtain some of the popular odors. Some of these substances are used for their odor values alone; some, for their value as fixatives—their ability to make a perfume fragrant even after the alcohol has evaporated and some, both for odor and as fixatives.

Raw materials used in perfumes may be divided into two groups based on their origin: (1) vegetable, (2) animal and (3) synthetic. Those of vegetable origin are used in the form of volatile oils (essential oils), balsams or resins. Those of animal and of synthetic origin are complex chemical substances apparently formed by oxidation and polymerization of volatile oils.[9] They are less important in perfumery than are the essential oils, and comparatively little is known of their chemical structure.

The essential oils are derived from flowers, fruits or their rinds, roots of plants and even the wood of some trees. As used by the perfume industry, they are only partially purified. In many instances, then, it is not known whether the allergic reactions caused by certain commercial essential oils are due to the basic oil or to some impurity.

Many essential oils have been partially analyzed. Some knowledge, therefore, of the structure of the compounds found in them is available. Alcohols and phenols have been identified. Aldehydes and ketones are found, as are also ethers and esters. Many also contain terpenes.[10]

Since many components of the various natural oils have been identified and their chemical structures determined, it has been possible to duplicate them in the laboratory. Many natural flower and fruit odors are being approximated by the use of synthetic chemicals.

The search for new synthetic compounds to take the place of the natural odors which have thus far defied duplication has been a more or less hit-and-miss affair. It has been noted by chemists specializing in this field that there is a certain resemblance between chemical structure and odor, but there has been no definite relationship established between chemical constitution and odor.[11] The chromophore, or "color bearer," theory of dyes has inspired some work in this field, but only a start has been made. It is hoped that eventually a definite relationship will be established.

There seems to be a relationship between the chemical structure of natural and of synthetic essential oils and their allergenic properties, but here, too, there is much to be done. Thus far it can be said that the unsaturated compounds, such as certain aldehydes and ketones, seem to be more irritating and allergenic than saturated compounds, in which the carbon linkages are satisfied. For instance, the citrus oils, known to be the worst offenders, all contain citral, an aldehyde with two unsatisfied olefinic carbon linkages.[12]

Only four substances of animal origin—ambergris, castor, musk and civet—are employed in perfumery. Their chemical structure is generally unknown. They are used primarily for their value as fixatives.[9]

Many natural and synthetic essential oils are used as fixatives. The one most liable to cause trouble is oil or oleoresin of orris. At one time the root of the iris (orris) was dried, powdered and used in cosmetic powders, sachets, dry shampoos and the like. Since it has been generally recognized that orris root powder frequently causes allergic reactions, the use of powdered orris root has been almost completely discontinued by cosmetic manufacturers. Unfortunately, the oil and the resin continue to find wide use as fixatives in perfumes.

Most cosmetic manufacturers do not compound their own perfume oils. These are purchased from firms which import and compound the various raw materials. The cosmetic or

9. Askinson, G. W.: Perfumes and Cosmetics—Their Preparation and Manufacture, New York, Norman W. Henley Publishing Company, 1922.

10. Poucher, W. A.: Perfumes, Cosmetics and Soaps, New York, D. Van Nostrand Company, Inc., 1942, vol. 2.

11. Moncrieff, R. W.: Chemical Constitution and Odour, Manufacturing Chemist **14**:33 (Feb.); 60 (March); 95 (April); 130 (May); 174 (June); 205 (July); 239 (Aug.) 1943.

12. Cheronis, N. F.: Organic Chemistry, New York, Thomas Y. Crowell Company, 1941.

perfume manufacturer, in most cases, knows nothing of the natural or synthetic oils used. Even if such firms conscientiously omit known allergens or irritants from the cosmetics themselves, they may unwittingly add to their products as perfumes essential oils and synthetic chemicals which are even more allergenic than the starches, gums and other chemicals omitted.

Dealers in perfume compounds will not divulge the composition of the finished products. They generally give each one a number or trade name to avoid duplication. This custom has existed in the perfume industry for years and is accepted by the manufacturers of cosmetics because many cannot profitably employ an experienced perfumer. Furthermore, it is generally believed that the incidence of allergic reactions is too small to interfere with the indiscriminate use of their products.

In view of the complex and partially unknown chemistry of perfume,[10] it must be understood that to perform patch tests would be complicated, incomplete and unsatisfactory at best.

In the case under consideration and in all cases of allergy in which perfume is suspected to be the etiologic factor, its complete elimination and the use of of unscented cosmetics will be quickly diagnostic. When perfume is definitely the cause of the allergy, such elimination of all perfumes and scented cosmetics will likewise be therapeutic.

SUMMARY

A case of chronic urticaria, apparently due to the scent of perfumes, was observed. Since the patient refused to submit to laboratory studies, the evidence that the use of perfumes was the etiologic factor is only clinical. Nevertheless, we believe that in studies of allergic diseases perfume must always be considered as such a causative agent, not only as a contactant but as an inhalant.

1 North Pulaski Road.
6 North Michigan Avenue.

PENICILLIN IN THE TREATMENT OF CUTANEOUS DISEASE

MAJOR ANDREW G. FRANKS
MEDICAL CORPS, ARMY OF THE UNITED STATES

WILLIAM L. DOBES, M.D., AND DOMINIC ROMANO, M.D.
ATLANTA, GA. NEW YORK

Not since therapy with the sulfonamide compounds was introduced has there been any therapeutic agent as completely studied as penicillin. The startling and almost miraculous results obtained by the use of this agent in the treatment of gonorrhea, meningitis, syphilis and septicemia are well known. It is our purpose to review the results obtained in the treatment of some cutaneous diseases with penicillin locally and parenterally administered.

TABLE 1.—*Classification of Forty-One Patients According to Type of Cutaneous Infection*

Disease	No. of Patients
Sycosis vulgaris	7
Acne (pustular)	5
Psoriasis	6
Favus	1
Lichen planus	2
Lupus erythematosus (chronic discoid)	2
Impetigo contagiosa	8
Dermatitis seborrheica with secondary infection	4
Ecthyma	1
Pemphigus vulgaris	1
Ludwig's angina	1
Gonorrheal conjunctivitis	1
Trichophytosis, secondarily infected	2
Total	41

The penicillin obtained was the dry, amorphous, yellowish form, and its sodium salt was the preparation used clinically. The solution employed contained 400 to 600 Oxford units per cubic centimeter. This was applied to the affected areas as a wet dressing, so that the lesions were constantly dampened with the penicillin solution. To prevent the solution from evaporating rapidly, the saturated gauze was well covered with oilcloth. For the intramuscular injections, 20,000 units of penicillin was mixed with 2 cc. of isotonic solution of sodium chloride.

Forty-one patients with varying cutaneous infections were used as subjects for therapeutic trial. Table 1 shows the distribution of diseases represented.

From table 1 it can be seen that there are several disease entities. In attempting to treat these various cutaneous diseases, we were aware of the methods and observations of Florey and Florey, Roxburgh, Christie and Roxburgh, Johnson and Schoch.[1]

Our intention was to determine the effectiveness of penicillin used locally and parenterally in the treatment of diseases caused by pyogenic organisms and also of chronic, recalcitrant and intractable diseases, such as psoriasis, lichen planus and lupus erythematosus. As far as could be determined, no reports have been rendered on results for these chronic diseases. Our patients were treated empirically.

Table 2 shows that 18 patients were treated by local medication. In all these patients it was possible to identify an organism which by biologic assay should respond to penicillin. The treatment consisted in the use of wet dressings or ointment of penicillin in concentrations of 400 to 600 units per cubic centimeter. In 4 patients with sycosis vulgaris, who previously had been treated with roentgen rays, vaccines and ointments, the response was good and almost immediate. In these 4 persons recurrences were checked by the continued use of penicillin ointment. For 1 patient whose disease was of several years' duration, local treatment was of no avail.

In the persons with pustular cystic acne from which Staphylococcus aureus was cultured, little improvement resulted from the use of penicillin in an oxycholesterol-petrolatum ointment base.[2] This preparation was applied twice daily for two months. No permanent improvement resulted. The use of penicillin locally for this type of acne was of no avail.

Local treatment was used with dramatic results for 8 patients with impetigo contagiosa. The pa-

1. Florey, M. E., and Florey, H. W.: General and Local Administration of Penicillin, Lancet **1**:387 (March 27) 1943. Roxburgh, I. A.; Christie, R. V. and Roxburgh, A. C.: Penicillin in Treatment of Certain Diseases of the Skin, Brit. M. J. **1**:524 (April 15) 1944. Johnson, H. M.: Penicillin Therapy of Impetigo Contagiosa and Allied Diseases, Arch. Dermat. & Syph. **50**:1 (July) 1944. Schoch, A. G.: Local Penicillin Therapy, ibid. **50**:202 (Sept.) 1944.

2. The preparation used was aquaphor (Duke Laboratories, Inc.).

ients were treated with wet dressings and penicillin ointment. From their lesions Staph. aureus and Streptococcus pyogenes were recovered. Penicillin assay indicated that these organisms would respond promptly to such therapy. In all the patients there was response within an average of five days.

To 1 patient with recurrent pyogenic ulcers of the leg from which Staph. aureus and beta hemolytic streptococci were recovered, wet dressings of penicillin gave only temporary superficial improvement. Once crusts began to form, penicillin failed, and the lesions would again completely break down. The patient in this case was treated later with injections of oxygen with considerable improvement. (Suggested by Lieutenant De Aguiar.)

Twenty-three patients were treated with penicillin, administered either intramuscularly or intravenously, as shown in table 3. From the table it can be seen that it was impossible to perform laboratory examinations, such as cultures or penicillin assays, in some cases. In this group there were 2 patients with sycosis vulgaris. One received 1,000,000 units of penicillin intramuscularly. He received 40,000 units every three hours for a total of twenty-five injections. The other patient received 1,805,000 units of penicillin intramuscularly and intravenously. The detailed report of the case of the latter patient follows:

A soldier aged 38 stated that in March 1942 he noticed an eruption about the nostrils. He was treated by a civilian physician and cured. Shortly afterward, however, numerous papular and pustular lesions at the corners of the mouth developed. They became more numerous and extended to the face, scalp and axillas. These lesions exuded a clear yellow fluid and then became crusted. After induction into the military service in June 1942, the patient received treatment at each station to which he was assigned. This consisted at one time or another of applications of ammoniated mercury, gentian violet medicinal, sulfur ointment, silver nitrate and salicylic acid. He was also given roentgen therapy, a total of 750, and sulfonamide compounds. He made no improvement, and since his condition was incompatible with military duty it was felt that a trial with penicillin in an effort to return him to duty was indicated. Cultures were obtained from the lesions. The offending organism was Staph. aureus, which when assayed with penicillin was shown to be susceptible to the drug. He was then given an initial dose of 30,000 units of penicillin by intravenous injection, which was followed by 25,000 units intramuscularly every three hours for nine days. He received a total of 1,805,000 units. This was supplemented by local application of penicillin solution (250 and 500 units

TABLE 2.—*Local Treatment*

Disease	Cases	Average Duration	Culture	Penicillin Assay	Treatment	Result	
Sycosis vulgaris.....	5	7 years	4 cases Staph. aureus 1 case Str. pyogenes	3 to 4 cm. zone of complete inhibition	Wet dressings; ointment	Cured..... Unimproved	4 1
Acne (pustular).....	3	5 years	Staph. aureus	3 to 4 cm.	Wet dressings; ointment	Unimproved	3
Impetigo contagiosa	8	6 days	Staph. aureus Str. pyogenes	4 cm. zone of complete inhibition	Wet dressings; ointment	Cured.....	8
Pyoderma (recurrent)	1	7 years (recurrent)	Staph. aureus and hemolytic streptococcus	.....	Wet dressings	Unimproved	
Gonorrheal conjunctivitis	1	11 days	Neisseria gonorrhoeae	.....	Wet dressings	Cured	

TABLE 3.—*Parenteral Treatment*

Disease	Cases	Average Duration	Culture	Penicillin Assay	Treatment	Result
Sycosis vulgaris.....	2	8 years	2 Staphylococcus aureus	3.5 cm.	Intramuscular and intravenous	Unimproved, 2
Acne (pustular).....	2	6 years	2 Staphylococcus pyogenes	3 cm.	Intramuscular	Improved, 2
Psoriasis vulgaris.....	6	12 years	.....	.....	Intramuscular	Unimproved
Lichen planus.....	2	2 years	.....	.....	Intramuscular	Unimproved
Favus.....	1	18 years	Trichophyton crateriforme	.....	Intramuscular	Unimproved
Lupus erythematosus.....	2	3 years	.....	.....	Intramuscular	Unimproved, 2
Seborrheic eczema with secondary infection	4	3 years	Staphylococcus pyogenes	.....	Intramuscular	Infection cleared; seborrheic dermatitis, unimproved
Pemphigus vulgaris.....	1	6 weeks	.....	.....	Intramuscular	Unimproved
Ludwig's angina.....	1	.....	.....	.....	Intravenous	Cured
Trichophytosis with secondary infection	2	½ year	Trichophyton gypseum Staphylococcus aureus	.....	Intramuscular	Pyogenic infection and fungous infection, unimproved

per cubic centimeter) twice daily to the lesions. It was sprayed on at first but was later applied in the form of continuous dressings. Treatment was discontinued when it was felt that maximum benefit had been obtained.

This patient while under treatment with penicillin made definite improvement. The axillas were not treated locally and were used as a control. The response in the axillas was as good as that on areas to which penicillin was applied locally. The eruption on the face almost completely cleared and the itching considerably lessened while under treatment. The scalp was the most resistant and made the least improvement, despite frequent shaving and removal of crusts. Unfortunately, the improvement was only temporary, since three days after use of penicillin was discontinued the face and axillas were about in the same condition as prior to treatment.

Results in this case of a chronic, recurrent eruption shows that penicillin is of no permanent value in the treatment of sycosis vulgaris. One also can conclude that although sycosis vulgaris is caused by pyogenic organisms which should respond to penicillin therapy clinically they do not always do so.

In 2 cases of pustular acne, intramuscular injection of penicillin was tried, each patient receiving 1,000,000 units of penicillin. Temporary improvement was noted in both patients about ten days after treatment. The pustules disappeared, leaving fresh scars. Discontinuance of this therapy was followed by a recrudescence of the pustular lesions. Observation of these 2 patients indicates that pustular acne will improve to only a slight degree and this improvement is only temporary.

Penicillin was also used intramuscularly in the treatment of six patients with psoriasis of long standing. These patients gave the usual history of being treated by many dermatologists and with various forms of therapy. Intramuscular injections of penicillin in doses of 1,000,000 units failed to affect the course of this disease in any way. Results in these 6 cases indicate to us that psoriasis still remains a chronic intractable disease.

In 2 cases of chronic lichen planus, in which the same method was used, the results were negligible.

In a case of favus due to Trichophyton crateriforme of eighteen years' duration, 1,000,000 units of penicillin, given intramuscularly, failed completely to alter the course of the disease.

As shown in table 3, 2 patients with lupus erythematosus were also treated with penicillin. In 1 the eruption remained unchanged. In the other the course was unchecked and the disease became much worse, as shown by the increase in the sedimentation rate and the dissemination of lesions.

In a group of 6 cases, consisting of 4 cases of seborrheic dermatitis and 2 of fungous infection, in which the patients were obviously secondarily infected, great improvement resulted from therapy with penicillin. Penicillin was also employed in 1 case of pemphigus foliaceus of six weeks' duration. The patient received a total dose of 1,000,000 units intramuscularly but died shortly afterward.

One patient with acute phlegmonous angina, which is usually fatal, responded dramatically to 2,000,000 units of penicillin given by continuous intravenous drip.

No serious toxic reactions were encountered after the clinical administration of penicillin in our patients. Only minor local discomfort was noted after repeated injections. A slight transient fever occurred in 1 (with pyoderma) shortly after intramuscular administration. No cutaneous or gastrointestinal disturbances were observed in this series.

SUMMARY

Forty-one patients with cutaneous diseases were given local and parenteral treatment with penicillin. This drug was found to be useful in the treatment of sycosis vulgaris, impetigo contagiosa and gonorrheal conjunctivitis when used locally. Whether penicillin was used intramuscularly or intravenously, it proved to be beneficial for sycosis vulgaris, pustular acne, Ludwig's angina and chronic cutaneous diseases complicated by secondary infection with pyogenic organisms. In our opinion, penicillin therapy is of no value for psoriasis vulgaris, lichen planus, favus, lupus erythematosus, pemphigus foliaceus, and seborrheic and chronic fungous dermatitis.

NOTE.—After the submission of this article, patients with cutaneous actinomycosis and leishmaniasis have been treated with penicillin. No permanent beneficial results were obtained. As to reactions to penicillin, urticarial and pityriasis-rosea-like eruptions have been encountered. In 1 patient bilateral hydroarthrosis of both knees occurred.

IS PENICILLIN A PHOTOSENSITIZING AGENT?

CAPTAIN ORLANDO CANIZARES *
MEDICAL CORPS, ARMY OF THE UNITED STATES

It is a well known fact that penicillin therapy produces few reactions. Urticaria seems to be the most common cutaneous reaction. In this report the possibility is suggested that penicillin acts as a photosensitizing agent.

Photodermatitis of vegetable origin has already been well studied.[1] It is due in most instances to external contact of the patient with the plant followed by his exposure to sunlight. The action of chlorophyll seems to be an important factor in the photosensitizing properties of certain plants. The mechanism of photosensitization by a fungus is undoubtedly different, since fungi lack chlorophyll.

REPORT OF A CASE

A 25 year old white pilot was admitted to the hospital on Jan. 29, 1944 for penicillin therapy. He had had gonorrhea for three weeks. He had received one course of treatment with sulfathiazole from January 6 to January 11 and another, with sulfadiazine, from January 14 to January 19. The total amount administered in the first course was 34 Gm. and in the second 37 Gm. The urethral discharge failed to respond to therapy, and the patient was referred to the hospital for treatment with penicillin.

On January 28 the results of laboratory examinations were as follows: A smear of the urethral discharge showed intracellular and extracellular diplococci. A culture from the urethral discharge was positive for gonococci. Urinalysis showed 20 to 25 leukocytes per high power field. The hemogram was normal, and the Kahn reaction of the blood was negative. The results of tests for sulfonamide compounds in the blood were negative. On January 29 the patient received a total of 50,000 units of penicillin in divided doses of 10,000 units every three hours. On January 30 he took a sun bath in the afternoon. At night an erythema was noticed on the areas previously exposed to the sun. This persisted in a rather severe form until February 2. On February 3 the diffuse erythema had subsided considerably, but a morbilliform eruption was noted on the back, chest and face and on the extensor aspect of the extremities. These areas were more severely affected by the sunburn than the rest of the body surfaces. The lesions were macules and varied in size from that of a match head to that of a lentil. They had a tendency to become confluent. The mucous membranes were not involved. There was no generalized or localized adenopathy. The temperature was normal. A hemogram on February 3 was normal. On February 4 the eruption had become more profuse. On February 5 it showed definite signs of improvement. It was still localized to the areas previously exposed to sunlight. The area not exposed to actinic rays was entirely free of lesions. On February 6 the patient was discharged, as the eruption had faded considerably and his urethral discharge had disappeared.

COMMENT

It is possible that the photosensitivity in this case was produced by the sulfonamide compounds previously administered, but this is unlikely, as fifteen days had elapsed since the administration of the drug and tests of the blood showed no residual sulfadiazine prior to the administration of penicillin. Besides, the patient stated that he had had at least three sun baths since the use of sulfadiazine was discontinued, without any abnormal reaction. The appearance of a morbilliform eruption in the same areas previously affected by a sunburn four days after treatment with penicillin strongly suggests the possibility that this drug had acted as a photosensitizing agent.

* Instructor in Dermatology, New York University College of Medicine, on leave of absence.

1. Stokes, J. H.; Beerman, H., and Ingraham, N. R.: Photodynamic Effects in Dermatology, Am. J. M. Sc. **204**:601 (Oct.) 1942.

MYCOSIS FUNGOIDES IN THE NEGRO

HARRY SIGEL, M.D.
CINCINNATI

Mycosis fungoides is uncommon in the Negro. There are only a few scattered case reports in the literature, and discussions at various dermatologic societies indicate that the disease is rarely seen in members of that race.

In August 1943 reports of 2 such cases were published in the Transactions of the Chicago Dermatological Society, one by Ebert and Otsuko [1] and the other by Mitchell and Scull.[2] In discussing these cases, Stillians [3] remarked that he had observed only 1 other case. Oliver,[3] on the other hand, noted that up to a few years previously the disease was rather uncommon in the Negro but that in the last few years he had seen a number of them with the disease. Ebert [3] stated that the patient whom he presented was the second Negro with mycosis fungoides that he had ever seen. Mitchell [3] also stated that the disease was thought to be rare in that race. In September 1943 Mitchell and Scull [4] presented another Negro with probable mycosis fungoides. Wile,[5] in discussing this case, stated that he did not recall having seen mycosis fungoides in a Negro. Nicholas [6] also presented a possible case of mycosis fungoides in a Negro.

An average of 359 patients are admitted yearly to the dermatologic service of the Cincinnati General Hospital, 48 per cent of whom are Negroes. Although 3 Negroes with mycosis fungoides have been observed in this service in the past twelve years, the records for only 2 of them are complete; they are presented in this paper. During the same period 4 white patients with mycosis fungoides were admitted.

CASE 1.—M. S., a 29 year old Negro woman, was admitted to the dermatologic service of the Cincinnati General Hospital on Sept. 12, 1931, complaining of a persistent generalized eruption of one year's duration. She had been treated locally with ointments, without relief, and had received seventy treatments with high voltage roentgen rays, with some temporary relief. The lesions, however, frequently recurred in the scar after the roentgen ray therapy.

Past History.—In early infancy she had an eruption on her hands which her parents called "eczema" and which cleared up with local treatment. At the age of 9 she had "ringworm" of her face and was benefited by tincture of iodine. Shortly afterward lesions appeared on her buttocks and spread over her back. These lesions persisted, and from time to time in the years following there were sporadic outbreaks on the extremities.

There was no known personal or family history of syphilis, but there had been a spontaneous abortion a few years previously. The patient had had pneumonia the previous year but no signs or symptoms of tuberculosis. There was no personal or family history of any type of allergy.

Physical Examination.—The patient was an obese young Negro woman, appearing neither acutely nor chronically ill. There was no cyanosis, dyspnea, icterus, pallor or edema of the extremities; there were no petechiae.

Examination of the skin revealed an extensive eruption from head to toes. It was of an essentially chronic nature and included many types of lesions. The early lesions were observed on the forearms in extensive groups of small maculopapular and small pustular lesions. On the scalp there were a few circular crusted areas. The skin of the face was thickened and scarred about the nose and mouth, giving the face a suggestive leonine appearance. Some scarring and desquamation were present about the ears. On the trunk and extremities were numerous raised circular lesions; these either were scarred entirely or were partially scarred, the remainder of the surface being covered with thick whitish crusts. Areas of lichenification were present in the flexural surfaces. On the dorsal areas were lesions of varying sizes and shapes covered with thick whitish scales, some of them "psoriasis-like." There were flat superficial areas of desquamation on the palms and over the feet. Over the trunk and extremities there were scattered numerous deeply pigmented smooth areas. The labia were thickened and whitish. There were no lesions in the vagina, mouth or pharynx.

The rest of the physical examination revealed essentially normal conditions, save for a basal systolic murmur on ausculation of the heart.

From the Department of Dermatology and Syphilology of the College of Medicine of the University of Cincinnati; Dr. H. L. Claassen, Director.

1. Ebert, M. H., and Otsuko, M.: Mycosis Fungoides in the Tumor Stage, Arch. Dermat. & Syph. **48**:214 (Aug.) 1943.

2. Mitchell, J. H., and Scull, R. H.: A Case for Diagnosis (Mycosis Fungoides), Arch. Dermat. & Syph. **48**:213 (Aug.) 1943.

3. In discussion on papers of Ebert and Otsuko, Mitchell and Scull and Oliver and Bluefarb, Arch. Dermat. & Syph. **48**:215 (Aug.) 1943.

4. Mitchell, J. H., and Scull, R. H.: Mycosis Fungoides, Arch. Dermat. & Syph. **48**:353 (Sept.) 1943.

5. Wile, U. J., in discussion on Mitchell and Scull,[4] p. 354.

6. Nicholas, L.: Mycosis Fungoides, Arch. Dermat. & Syph. **49**:291 (April) 1944.

Laboratory Data.—The red blood cell count varied between 4,300,000 and 3,400,000 with 60 to 70 per cent hemoglobin (Tallqvist). The leukocyte and differential counts were normal, and no eosinophils or pathologic blood cells were found. Results of urinalysis were normal. Scrapings of the lesions failed to grow fungi. Serologic tests of the blood elicited negative reactions. A series of roentgenograms of the gastrointestinal tract were reported as showing essentially normal conditions.

Biopsy of skin taken from one of the lesions was reported by the pathologists as indicating mycosis fungoides. The section showed parakeratotic crusting and occasional areas of follicular plugging. There was acanthosis almost palisade in type, with deep rete plugs and intercellular bridges. There was spotty pigmentation of the basal layer, with numerous areas of vacuolation and degeneration, and an extensive cellular infiltrate extended over the pars papillaris deep down to the pars reticularis. This infiltrate was made up of dense or close-packed cells, consisting of lymphocytes, plasma cells, eosinophils and large multinucleated giant cells with deeply staining nuclei. Scattered through the cellular infiltrate were numerous chromatophores. The collagen fibers showed fragmentation and separation. Glands and blood vessels showed no changes.

A diagnosis of the tumor phase of mycosis fungoides was made.

The patient's course was downhill while she was in the hospital. She received numerous roentgen ray treatments, with only temporary relief. She gradually began to depend more and more on morphine and scopolamine for relief of pain. Her condition slowly became worse, with severe weakness and cachexia. She died on March 29, 1932 and a postmortem examination was made.

At necropsy the conditions observed were: mycosis fungoides changes of the lymph nodes and skin; pulmonary congestion and edema, with areas of lobar pneumonia and infarction; congestion of the spleen, with moderate proliferation of the reticuloendothelial system; toxic nephrosis; chronic passive congestion of the liver, with moderate atrophy of the hepatic cords; toxic hepatosis, with pronounced fatty infiltration; thrombosis of the veins of the bladder; toxic myocardosis; decided postmortem changes of the pancreas and ileum; slight diffuse fibrosis of the adrenal glands and early generalized arteriosclerosis.

Case 2.—M. D., a 56 year old Negro woman, was first seen in the dermatologic clinic at the Cincinnati General Hospital on Sept. 14, 1943. She complained of a generalized pruritus of about one year's duration. Itching started on the hands and subsequently spread to the arms, legs and body. The patient excoriated her skin, and these areas became irritated, bled and crusted and finally became thickened and lichenified.

There was a past history of hypertension, cholecystectomy about seven years previously and a rectal fissure twenty years previously.

Physical examination of the skin revealed thickened, raised, deeply pigmented plaques covered with fine scales of various sizes and of round or oval shape (the figure). The thicker plaques, with elevated well defined borders, were found on the mesial surfaces of the thighs and on the under side of the upper arms. There were smaller lesions on the hands. On the face the lesions were smaller and flatter and with less definite margins. There were few lesions on the back, and these were flat, pigmented and slightly scaly.

Early tumor phase of mycosis fungoides (case 2).

There was some scaling in the interdigital spaces of the feet.

The rest of the examination revealed normal conditions with the exception of the cardiovascular system. The patient had hypertension (blood pressure of 160 systolic and 70 diastolic), and a precordial systolic murmur was heard more over the base of the heart, loudest in the second right interspace.

Laboratory Data.—The red and white blood cell counts and the differential count were always within normal limits. The report of hematologic consultation for the study of blood smears stated that the findings were not diagnostic of any particular syndrome and were consistent with any subacute disease.

Results of examinations of the urine were consistently normal.

Scrapings of scales from the lesions showed no growth on Sabouraud's medium. A trichophytin test elicited a negative reaction. A roentgenogram of the chest showed no infiltration and no enlargement of hilar nodes. Biopsy of the skin from one of the

involved areas showed spongiosis, parakeratosis and intraepidermal vesicles. There was edema of the dermis, with scattered perivascular infiltrate of plasma cells and eosinophils. An eczematoid reaction was suspected from the biopsy.

The patient had an uneventful course in the hospital except for an unexplained fever which lasted about ten days. The lesions improved with local medication and low voltage roentgen ray therapy. She was discharged in October 1943 with no definite diagnosis, although the premycotic stage of mycosis fungoides as well as an allergic eczematoid dermatitis was suspected.

The patient returned to the clinic two months later with a pronounced exacerbation of her lesions and was readmitted to the ward. There were many crusted oozing lesions scattered on all parts of the body and ranging from the size of a dime to that of a silver dollar. Some of the areas were confluent and formed even larger lesions.

A biopsy of the skin from an involved area was made. The section showed extensive acanthosis with numerous long rete plugs with some intercellular bridging. The basal cell layer showed some vacuolation and considerable loss of basal cell pigment. There were occasional areas of chromatophore pigment. Dense cellular infiltrate was present, extending in large sheetlike masses throughout the entire dermis. This infiltrate was composed of densely packed lymphocytes, polymorphonuclear cells, eosinophils and multinucleated large cells. Large cells with pale bluish nuclei were also observed. Blood vessels showed no remarkable changes.

A diagnosis of the tumor phase of mycosis fungoides was made.

The patient was then given many roentgen ray treatments, which gradually improved her enough to enable her to go home.

CASE 3.—No detailed records are available on the third case save a brief report of the patient's presentation before the Cincinnati Society of Dermatology and Syphilology. She was admitted in the tumor phase of mycosis fungoides, with typical biopsy findings, and died while in the hospital. The diagnosis of mycosis fungoides for this Negro woman was accepted by the society.

The clinical features in these cases were in no ways different from the picture in cases of mycosis fungoides in white patients.

CONCLUSIONS

In a study of 3 cases of mycosis fungoides in Negro patients, no special clinical or histologic differences between mycosis fungoides in white and in Negro patients could be made out.

DERMATOLOGIC PRACTICE IN A STATION HOSPITAL IN SOUTHERN CALIFORNIA

A COMPARISON WITH PRIVATE PRACTICE

CAPTAIN ERVIN EPSTEIN
MEDICAL CORPS, ARMY OF THE UNITED STATES

It should be obvious that practice of medicine in the Army differs from that in civilian life. The reasons for this are multiple. Even if the factors of trauma and tropical dermatoses are eliminated, the cutaneous diseases studied in an Army hospital are not identical with those seen in peacetime. The type of patient observed determines the cutaneous changes encountered. In the Service, one is dealing with healthy young men. Therefore, one should expect an increase in the diseases commonest in this group, with an absolute or relative absence of dermatoses peculiar to children, women and persons of advanced age. The relatively crowded living facilities would be expected to encourage the spread of contagious diseases. The dermatologist would be called on to treat certain dermatoses seldom seen in his civilian practice, including, as an example, sunburn. This is due to the fact that persons with sunburn are seldom referred by the general practitioner to the specialist in diseases of the skin.

To confirm or disprove this conception, 1,280 patients seen in a station hospital in Southern California were compared with the last 1,280 patients treated in civilian life. In the former group, a total of 1,519 diagnoses were made while in the latter series, 1,607 diseases were encountered. Among the civilian patients, only 28.3 per cent were eligible for military service by virtue of their age and sex. Although some of the older officers and families of the officers or enlisted men were included in the Army group, over 95 per cent of the patients were men ranging in age from 18 to 38 years.

RELATIVE FREQUENCY OF DERMATOSES

Table 1 shows the 20 most common cutaneous diseases encountered in the Army series. The incidence in the civilian group is included to provide a ready basis for comparison. Table 2 demonstrates the 20 commonest dermatoses seen in private practice as compared with the incidence of the given diseases in the Army group. A study of these tables offers certain interesting facts.

TABLE 1.—*Incidence of Most Common Dermatoses in Service Series Compared with Incidence in Civilian Group*

		Army		Civilians		
No.	Dermatoses	Patients	Per Cent	Number	Patients	Per Cent
1.	Dermatophytosis	239	16.8	5	96	7.5
2.	Eczema	204	15.9	4	99	7.7
3.	Dermatitis venenata	145	11.3	1	278	21.6
4.	Verrucae	115	9.0	6	76	5.9
5.	Scabies	93	7.2	11	39	3.0
6.	Acne vulgaris	70	5.5	3	100	7.7
7.	Dermatitis actinica	56	4.7	..	1	0.08
8.	Seborrheic dermatitis	47	3.7	2	136	10.6
9.	Impetigo contagiosa	47	3.7	8	47	3.7
10.	Psoriasis	38	2.9	12	35	2.7
11.	"Bites"	29	2.3	16	22	1.7
12.	Nevi	27	2.1	13	33	2.6
13.	Tinea versicolor	25	1.9	..	6	0.5
14.	Urticaria	23	1.8	18	20	1.6
15.	Pityriasis rosea	23	1.8	10	41	3.2
16.	Diseases of sweat glands	23	1.8	..	4	0.3
17.	Pyoderma	16	1.2	..	9	0.7
18.	Syphilis (primary)	15	1.2	..	1	0.08
19.	Furunculosis	14	1.1	16	23	1.8
20.	Herpes simplex	14	1.1	..	16	1.2

The heading "Number" refers to position in civilian list, as dermatophytosis is no. 1 in Army list but fifth among civilians.

TABLE 2.—*Incidence of Most Common Dermatoses in Civilian Group Compared with Incidence in Service Series*

		Civilians		Army		
No.	Dermatoses	Patients	Per Cent	Number	Patients	Per Cent
1.	Dermatitis venenata	278	21.6	3	145	11.3
2.	Seborrheic dermatitis	136	10.6	8	47	3.7
3.	Acne vulgaris	100	7.7	6	70	5.5
4.	Eczema	99	7.7	2	204	15.9
5.	Dermatophytosis	96	7.5	1	239	16.8
6.	Verrucae	76	5.9	4	115	9.0
7.	Keratoses	52	4.1	..	10	0.8
8.	Impetigo contagiosa	47	3.7	9	47	3.7
9.	Epitheliomas	41	3.2	..	7	0.5
10.	Pityriasis rosea	41	3.2	15	23	1.8
11.	Scabies	39	3.0	5	93	7.2
12.	Psoriasis	35	2.7	10	38	2.9
13.	Nevi	33	2.6	12	27	2.1
14.	Furunculosis	23	1.8	19	14	1.1
15.	Angiomas	22	1.7	..	2	0.16
16.	"Bites"	22	1.7	11	29	2.3
17.	Dermat. medicamentosa	21	1.6	..	8	0.6
18.	Urticaria	20	1.6	14	23	1.8
19.	Sycosis vulgaris	18	1.4	..	12	0.9
20.	Pruritus ani et/or vulvae	17	1.3	..	7	0.56

The tables indicate that certain diseases are more common in the Army, including superficial mycoses, eczema, verrucae, scabies, dermatitis

Read before the Section on Dermatology and Syphilology, California Medical Association, Los Angeles, May 8, 1944.

actinica and diseases of the sweat glands. On the other hand, many were seen more frequently among civilians, including contact dermatitis, seborrheic dermatitis, epitheliomas and keratoses. Rosacea was fourteen times as common in the civilian group. In a few, there was little or no difference, as exemplified by impetigo contagiosa, psoriasis, urticaria, herpes simplex and zoster. The reasons for the discrepancies between the two series will be discussed later.

Although 94 different diagnoses were made in the Army group and 137 in the civilian group, a study of the tables indicates that more than three fourths of the cases fell within the 20 most common conditions in each series. Among the Army patients, 63.5 per cent were accounted for by the first 10 diagnoses and an additional 13.2 per cent by the next 10, a total of 76.7 per cent. Among the civilians, the 10 most frequent diagnoses included 60.3 per cent and the subsequent 10, 15.5 per cent, for a total of 75.8 per cent of the patients. This reiterates the importance of a thorough knowledge of the everyday conditions in the successful practice of dermatology.

A consideration of the rare lesions show a greater frequency among the civilians (35 to 11). This is to be expected because of the more varied material. Civilians included patients with idiopathic calcinosis cutis, eczema vaccinatum, multiple benign cystic epithelioma, erythema diutinum, erythroplasia of Queyrat, exfoliative erythroderma, folliculitis decalvans, glomus tumor, glossitis rhomboidea mediana, lichen sclerosus et atrophicans, lupus vulgaris, lymphatic leukemia cutis, necrobiosis lipoidica diabeticorum, pemphigus, pigmented stripe of the nail, pseudo atrophoderma colli, pseudopelade, pseudo xanthoma elasticum, purpura annularis telangiectodes, giant cell sarcoma, fibroblastic sarcoma, idiopathic hemorrhagic sarcoma of Kaposi, sarcoid, other tuberculids, dermatitis herpetiformis and parapsoriasis. In the Army, only dermatitis herpetiformis, keratosis follicularis, parapsoriasis, ectodermosis erosiva pluriorificialis, xeroderma pigmentosum, angioma serpiginosum and leprosy were observed. As I have stated, the common dermatoses are the most important but familiarity with the unusual conditions is essential for the proper development of a dermatologist.

The opportunities for surgical experience must also be considered. The dermatologist in the Army has an opportunity to improve his technic by working with competent surgeons. However, he lacks patients with the wide variety of diseases that can be treated by surgical means. Table 3 shows the dermatoses treated by surgical approaches in Army personnel and in civilians. The most important lack in the Army is the opportunity to treat the important malignant and premalignant diseases. This is explained by the ages of the men under consideration. Of the diseases presented by the soldiers 11.2 per cent were treated by surgical or electrosurgical means as compared with 19.8 per cent in the civilians. An equal number of warts was removed in each group, but due to the fact that nearly twice as many operations were performed on the civilians, the percentage of total operations for removal of verrucae was twice as great in the Service. Twice as many moles were removed from civilians. Nevi are mainly a cosmetic problem and therefore one that women would give more attention to than do fighting men. The increase in sebaceous cysts in the Service is more apparent than real. Surgeons, general practitioners and others in civilian life remove many of these lesions without referring them to a dermatologist. The removal of degenerative and malignant lesions is more common in civilians for often repeated reasons. Included in this group are keratoses, cutaneous horns, leukoplakia, epitheliomas and sarcomas. Angiomas are usually seen in infants or persons of advanced age; hence the comparative absence in the Service series of cases.

TABLE 3.—*Dermatoses Treated Surgically in Service Series Compared with Those in Civilian Group*

No.	Condition Treated	Army		Civilians	
		Cases	Per Cent	Cases	Per Cent
1.	Verrucae	68	47.5	62	24.4
2.	Nevi	18	12.6	31	12.2
3.	Sebaceous cysts	13	9.1	7	2.8
4.	Abscess (incision)	11	7.7	4	1.6
5.	Biopsy	9	6.3	7	2.8
6.	Keratoses	6	4.2	52	20.2
7.	Acne (desiccation)	6	4.2	0	....
8.	Onychectomy	5	3.5	3	1.2
9.	Foreign body granuloma	4	2.8	0	....
10.	Epitheliomas	3	2.1	40	15.7
11.	Granuloma pyogenicum	3	2.1	4	1.6
12.	Angiomas	2	1.4	8	3.1
13.	Fibroma	1	0.7	7	2.8
14.	Lipoma	1	0.7	1	0.4
15.	Folliculitis keloidalis	1	0.7	2	0.8
16.	Lymph node incision	1	0.7	0	...
17.	Cutaneous horn	1	0.7	8	3.1
18.	Epithelial cyst	1	0.7	1	0.4
19.	Melanoma	1	0.7	1	0.4
20.	Neurofibroma	1	0.7	0	...
	Leukoplakia	0	...	6	2.4
	Sarcoma	0	...	3	1.2
	Molluscum contagiosum	0	...	2	0.8
	Chondrodermatitis nodularis chronica helicis	0	...	1	0.4
	Multiple benign cystic epithelioma	0	...	1	0.4
	Glomus tumor	0	...	1	0.4
	Lupus vulgaris	0	...	1	0.4

SPECIAL PROBLEMS IN THE ARMY

In the ultraspecialization of an Army hospital, the dermatologist is confronted by certain problems of organization and supply that do not exist in his own office. For instance, all ultraviolet radiation therapy is administered by the physical therapy department. While it is prescribed by the dermatologist, it is not administered by him, which leads to certain complications. In some hospitals, dermatologic surgical procedures are performed by general surgeons. Roentgen ray therapy is not available in station hospitals and is controlled by the radiologist in general hospitals. Furthermore, the radiologic diagnostic case load is so great as to preclude radiotherapy for comparatively innocuous dermatoses.

It is necessary for the dermatologist to engage in certain activities foreign to his usual routine. This includes military duties, administrative details, preparation of forms, maintenance of discipline and a certain amount of general practice in assuring each patient in the hospital of a complete medical examination. Special duties as officer of the day, physical inspection for contagious diseases, medical officer on troop maneuvers, etc., further diversify his activities.

TABLE 4.—*Superficial Mycoses Seen in Service Series*

No.	Type	Cases	Per Cent
1.	Dermatophytosis	151	63.2
2.	Tinea cruris	71	29.7
3.	Tinea versicolor	25	10.4
4.	Involvement of hands	13	5.4
5.	Onychomycosis	11	4.6
6.	Tinea corporis	8	3.3
7.	Natal cleft and buttocks	6	2.5
8.	Tinea barbae	4	1.7
9.	Tinea capitis	2	0.8
10.	Involvement of axillas	1	0.3
11.	Erythrasma	1	0.3
12.	Majocchian granuloma	1	0.3

Life in the service modifies the type of diseases treated, and some of the more common ones will be considered at this time.

Dermatophytosis. — The commonest dermatoses seen in the Army are those due to superficial mycotic infections. Such diseases are more than twice as common as in private practice. Table 4 gives the incidence of the various types encountered in the service.

As expected, "athlete's foot" is the most common manifestation. However, the incidence of tinea cruris, which comprises nearly 30 per cent of the dermatomycoses, is surprising. The sex and age of the patients involved are probably potent factors in explaining this. An incidence of tinea versicolor of 10 per cent in this group also seems excessive. It cannot be explained by conditions in the Army, because the eruption antedated induction into the Service in all cases.

Involvement of the hands by a true local mycotic infection occurred in 5.4 per cent of the cases. This roughly confirms the findings presented in a previous paper,[1] although the basis for determining the incidence varied. The fact that not one case of primary vesicular dermatophytosis of the hands was encountered is of importance. It was demonstrated in the previous study that this form occurs only in women. All of the cases in the Army were of the desquamative or hyperkeratotic type.

Onychomycosis was common. In 1 patient, 15 nails were involved. In another, seen at a different station hospital and not included in this compilation, all 20 nails were involved and were avulsed under general anesthesia. Onychomycotic involvement of the hands was often accompanied by a hyperkeratotic trichophytosis of the hands. Trichophyton purpureum was a frequent offender in this respect.

Despite the age of the patients, tinea corporis and tinea capitis were occasionally seen. The 4 cases of tinea barbae were a surprise, as this disease is encountered rarely on the Pacific coast. All of these patients were from the Middle West. It might also be mentioned that involvement of the natal cleft and buttocks was not infrequent, especially in association with tinea cruris.

Eczema.—Atopic eczema was the second most common dermatosis. Most of the patients recounted a long history of repeated relapses with induction into the Army while the disease was in a quiescent state. Many received medical discharges because of recurrences after short periods of service. One often hears the statement that such patients do well with a change of environment. The desert is recommended particularly. This series disputes the value of such advice. Most of the patients came from the Middle West, and the change to the Pacific coast was usually of no benefit. Furthermore, the majority became worse on the deserts of Southern California.

Dermatitis Venenata.—Most of these eruptions were due to leather, wool, soap, metals, grease and oil. Of course, nail polish dermatitis was not seen. Since most patients received prompt, adequate treatment, there was a dearth of dermatoses due to self medication. This was a welcome change from the overtreated civilian. Many examples of leather and wool dermatitis were seen. In the former group, perspiration seemed to precipitate the eruption. Trichophytosis also acted as a contributory factor when

1. Epstein, E.: Dermatophytosis of the Hands: Diagnosis and Prognosis, Arch. Dermat. & Syph. **45**: 1113 (June) 1942.

the feet were involved. Wool dermatitis often followed scabies and sulfur dermatitis. In both leather and wool allergies, the eruption and sensitivity tended to be comparatively persistent. Eruptions due to metal were usually caused by identification tags worn on the chest. Some of the men employed plastic strings to suspend the tags around the neck. These plastics proved to be allergenic in some instances.

Verrucae.—In about 20 per cent of the patients treated by local applications, such as tincture of iodine, the lesions cleared without surgical intervention. However, curettage followed by chemical cauterization was the most efficacious method employed.

Scabies.—The incidence of scabies is probably no greater than that encountered in a clinic practice. In most cases in civilian life this disease is diagnosed and treated by the general practitioner. Hence, the percentage seen by the dermatologist is greater among soldiers.

Acne Vulgaris.—The greater incidence of acne vulgaris in civilian practice is due to the inclusion of females in that group. Adolescent girls are more concerned with cosmetic problems than are boys. Therefore, they are more apt to seek medical care than the man with the same disfiguring complaint. Roentgen ray therapy was not available, but therapeutic results following use of a simple face lotion were comparatively good. This is assumed to be due to the active outdoor life led by the soldiers in a training camp.

Dermatitis Actinica.—Eruptions due to exposure to the sun were common. The camp is located on the seashore. No such eruptions were encountered in a similar hospital in the desert. During the summer months, the men would lie on the beach for from one to four hours on Sunday. This resulted in many severe burns, 52 of the 56 listed requiring hospitalization. Constitutional symptoms included fever, malaise, nausea, vomiting and, in 1 case, anuria. In some patients, large bullae extending deep into the dermis were found to be filled with coagulated serum. In addition to the cases of sunburn, there were 6 patients with eruptions considered to be due to solar sensitivity. In 4 the eruption was of the eczematoid type and in 1, urticarial. The sixth patient presented sarcoid-like nodules that cleared on hospitalization and recurred promptly on exposure to sunlight. There were also 11 patients with severe inflammation of the lower lip. In 3, the lower lip was replaced by exuberant granulation tissue. Therapy consisted of hospitalization and repeated cauterization with fused silver nitrate. Protective ointments containing tannic acid and phenyl salicylate were ineffective in preventing recurrences in patients with photosensitivity and/or cheilitis. It was interesting that the cheilitis did not in any instance coexist with a severe sunburn.

Psoriasis.—While the incidence of this disease was practically identical in the two groups, other factors make it noteworthy. Every case of psoriasis, except 1, became accentuated or precipitated in the Army. Of course, Army life is filled with psychic conflicts and annoyances to the individual. It is believed that these factors aggravated the disease. It was also found that this dermatosis responded well if treated with ultraviolet radiation plus the internal use of sulfanilamide and/or a crude coal tar paint applied locally.

Hyperhidrosis, Dyshidrosis and Bromhidrosis.—Manifestations of increased or altered activity of the sweat glands were more common in the Army, because the soldiers lead a more strenuous life than the average civilian. Involvement of the palms and soles was frequently encountered. All of these disturbances were particularly common in troops in the desert in summertime.

Keratoses and Epitheliomas.—The oft-accentuated age factor prevented more cases of these diseases from appearing in the Army. However, several cases of malignant disease are worthy of mention. In a 23 year old woman, wife of an enlisted man, a basal cell epithelioma developed on the root of her nose in a patch of lupus erythematosus. The preceding eruption was of two years' duration. A 60 year old woman, wife of an officer, had her left breast removed because of cancer five years before examination. She presented five superficial basal cell epitheliomas on her right breast. A 32 year old enlisted man presented a basal cell epithelioma of the left lower eyelid of five years' duration. No sarcomas were encountered. It is believed that the 3 sarcomas seen among the private patients represent an abnormally high incidence. In addition, there were 2 instances of idiopathic hemorrhagic sarcoma of Kaposi in the group from private practice.

Rosacea.—Only 1 case of rosacea was seen in the Army. The patient presented a severe eruption of the pustular type. In comparison, there were 14 civilians with this disease. This is not surprising when one considers that rosacea is predominantly a disease of middle-aged women.

Seborrheic Dermatitis.—The only explanation that I can offer for the increased incidence among civilians is that "dandruff" is a minor ailment

which seldom worries the healthy young man. On the other hand, women are distressed by flakes of "dandruff" on their shoulders. There were no cases of seborrhea nochum among the soldiers, further increasing the difference.

Pyodermas.—The incidence of infections of the skin due to streptococcus and/or staphylococcus was not excessive. The combined incidence of impetigo contagiosa, ecthyma, furunculosis, folliculitis, cellulitis, sycosis vulgaris and paronychia was only 7.6 per cent. In private practice, these diagnoses were made for 11.8 per cent of the patients. The comparatively low incidence could be explained by the cleanliness that the Army insists on.

Venereal Diseases.—The incidence of active venereal diseases included 15 cases of primary syphilis, 10 of secondary syphilis and 4 of lymphogranuloma venereum (a total of 29 cases). This far exceeds the 1 patient with a chancre, 3 with secondary infections and none with lymphogranuloma in the civilian group. However, the increased incidence among the soldiers is also more apparent than real. The frequent inspections and regulations concerning such matters force the man in the Service to report for early diagnosis and treatment. Therefore, fewer cases reach latency. Furthermore, all of the cases of syphilis are concentrated in one department rather than being diffused through every office in a given community.

Self-Induced Dermatoses.—It is worthy of mention that but 2 instances of neurotic excoriations, both in morons, were seen in the Army. In addition, 1 patient who resented being in the Army had a self-inflicted dermatitis. This is an extremely low incidence indeed.

SUMMARY

1. The incidence of cutaneous disease in 1,280 soldiers as compared with the incidence of such diseases in 1,280 patients seen in private practice showed that fungous infections, eczema, verrucae, scabies and dermatitis actinica are encountered more frequently in soldiers than in civilians. On the other hand, keratoses, epitheliomas, rosacea, seborrheic dermatitis and dermatitis venenata are seen less often in this group.

2. Sex, age and environment have an influence on this difference in occurrence.

CUTANEOUS LEISHMANIASIS (ORIENTAL SORE)

VI. TREATMENT WITH QUINACRINE HYDROCHLORIDE

D. A. BERBERIAN, M.D.

BEIRUT, LEBANON

Flarer [1] (1938) stated that solution of quinacrine hydrochloride injected into the skin around oriental sore rapidly destroyed the parasites and cured the disease. He recommended one to four injections of 0.05 to 0.1 Gm. of quinacrine hydrochloride dissolved in 1 or 2 cc. of distilled water to be given at the first treatment and the quantity to be increased at subsequent treatments to 0.3 Gm. He also stated that with this treatment in some cases a single injection was sufficient to bring about a cure. He reported on the use of the treatment in 14 cases. The same method of treatment was used in a few cases by Cupi and Cattapan [2] (1942) in Eritrea, with satisfactory results. Dobrotvorskaya [3] (1941) elaborated the treatment originally introduced by Flarer and varied it according to the type and age of lesions. He claimed that the early dry type of papules could be destroyed with a 5 per cent solution of quinacrine hydrochloride if it was injected at several points around the papule. He treated the ulcerated sores by infiltration with 5 to 10 cc. of a 3 per cent solution and applied locally an ointment of 10 per cent quinacrine hydrochloride as well as an ointment of 2-ethoxy-6,9-diaminoacridine lactate (rivanol) and another of strong protein silver (protargol). He admitted that none of the modifications that he introduced produced complete cures, though in all cases he observed considerable improvement. Mazza and Cornejo [4] (1940) used Flarer's method in the treatment of American leishmaniasis. They infiltrated the sore with 5 cc. of a 10 per cent solution of quinacrine hydrochloride and at the same time gave 3 tablets of 0.1 Gm. each daily for seven days. They obtained good results with unbroken cutaneous lesions, but mucosal lesions failed to respond to this treatment. For the latter, they recommended combined stibophen and chiniofon medication. Marchionini [5] (1941) reported on the treatment in 300 cases, in which he used 1 to 2 cc. of a 10 to 20 per cent solution of quinacrine hydrochloride. Local injections were repeated 2 or 3 times at eight to ten day intervals. He used intravenous and intramuscular injections of 0.1 to 0.3 Gm. for multiple sores. He obtained good results in early stages but failed to effect a cure in many cases of atypical and chronic leishmaniasis, especially in the stage when leishmanias could not be found in the lesions.

I attempted to try out the effectiveness of Flarer's method of treatment on the artificial sores that were produced on volunteers. These sores were produced on the anterior aspects of the thighs, about 15 cm. above the knee cap, by the intracutaneous injection of 0.2 cc. of a suspension of Leishmania tropica containing approximately 200,000 leishmanias. The following results were obtained:

EXPERIMENTAL STUDIES

EXPERIMENT V-64.—A one hundred and seventy-two day old artificially induced sore, nonulcerated and about 12 mm. in diameter, was treated with 1, 2 and 3 cc. doses of a 10 per cent solution of quinacrine hydrochloride given at weekly intervals. The first two injections were well tolerated, but the third injection gave a well defined local inflammatory reaction, about 15 cm. in diameter, associated with some fever (temperature 101.3 F. [38.4 C.]) and malaise. The lesion swelled and began to ulcerate. The inflammation gradually subsided, leaving a large ulcer which healed slowly by granulation and left a scar 4 cm. in diameter.

Local infiltration with a 10 per cent solution of the drug did not favorably alter the course of the sore but precipitated early ulceration and enlarged the sore, which on healing left a scar 25 by 30 mm. in diameter.

From the Department of Parasitology, the American University of Beirut.

1. Flarer, F.: Nuovo methodo di cura per la leishmaniosi cutanea (bottoni d'oriente), Boll. d. Ist. sieroterap. milanese **18**:469-473, 1938.

2. Cupi, N., and Cattapan, A.: Contributo allo studio del bottone d'oriente nel governo dell' amara, Boll. Soc. ital. di med. e ig. trop. **1**:19-24, 1942; abstracted, Trop. Dis. Bull. **40**:124, 1943.

3. Dobrotvorskaya, N. V.: Treatment of Cutaneous Leishmaniasis, in Problems of Cutaneous Leishmaniasis, Ashkabad, pp. 207-226 (in Russian, with French summary, p. 301). Hoare, C. A.: Cutaneous Leishmaniasis (Critical Review of Recent Russian Work), Trop. Dis. Bull. **41**:331-345, 1944.

4. Mazza, S., and Cornejo, A.: Ensayos de atebrina en leishmaniosis tegumentaria americana, Prensa méd. argent. **27**:1734-1736, 1940.

5. Marchionini, A.: Die Behandlung der Orientbeule, Schweiz. med. Wchnschr. **71**:1220-1223, 1941.

EXPERIMENT V-75.—A one hundred and fifty-seven day old artificially produced oriental sore 12 mm. in diameter and nonulcerated was treated with a 10 per cent solution of quinacrine hydrochloride. Two doses (1 and 2 cc.) were given one week apart. The second injection was followed within a few hours by an intense local reaction, without fever. Because of the local reaction, injections were discontinued. The lesion took its regular course and was not affected by the injections of quinacrine.

EXPERIMENT V-77.—A one hundred and fifty-seven day old artificially produced nonulcerated oriental sore about 12 mm. in diameter was infiltrated with solution of quinacrine hydrochloride. Two injections, 1 and 2 cc., were given at weekly intervals. The second injection caused an intense local inflammatory reaction and caused the lesion to ulcerate. Infiltration with quinacrine solution did not affect favorably the course of the disease. It caused early ulceration, irritated the sore, enlarged it and left a big scar about 45 mm. in diameter.

EXPERIMENT V-78.—A one hundred and fifty-seven day old artificially induced nonulcerated oriental sore, about 15 mm. in diameter, was infiltrated with 1 cc. of a 10 per cent solution of quinacrine hydrochloride. A week later a second dose of 1 cc. was injected locally. Though the first injection seemed to have caused a slight improvement in the appearance of the sore, the second injection was followed by much local swelling which subsided in three days, leaving an ulcerated sore. Because of the intense local reaction, no further injections were given. Quinacrine did not favorably affect the course of the disease; it caused early ulceration. The sore healed by granulation and left a large scar about 35 mm. in diameter.

EXPERIMENT V-79.—A one hundred and fifty-seven day old artificially produced oriental sore, nonulcerated and about 12 mm. in diameter, was infiltrated with 1 cc. of a 10 per cent solution of quinacrine hydrochloride. A week later a second dose and one week later a third dose of 2 cc. of the solution were injected locally. The third injection caused a severe local reaction with swelling. No further injections were given. The sore did not ulcerate until two months later. It healed just about a year after the inoculation. Infiltration with quinacrine did not influence favorably the course of the disease.

EXPERIMENT V-80.—A one hundred and fifty-seven day old artificially produced ulcerated oriental sore was infiltrated with 2 cc. of a 10 per cent solution of quinacrine hydrochloride. A week later a second dose of 2 cc. of the solution was injected. The lesion appeared clean and stopped oozing pus. A week later a third injection of 2 cc. of the solution was given, which caused severe swelling at the site of the injection, and the ulcer began to grow larger. Fifteen months after the appearance of the sore, it had healed completely and had left a scar about 30 mm. in diameter. Infiltration with quinacrine did not affect favorably the course of the disease in this case.

CONCLUSION

Six volunteers with oriental sore were treated by infiltrating the sores with a 10 per cent solution of quinacrine hydrochloride. All sores were one hundred and fifty-seven days old. One to three doses of 1 to 2 cc. of the solution were injected at weekly intervals. The injections did not favorably affect the course of the disease. My observations essentially confirm those of Marchionini. On the other hand, I have observed that intramuscular or intravenous injections of diethylamine paraaminophenylstibinate [6] (twelve biweekly injections of 5 cc.) administered during the ulcerative stage of the sores hastened the process of healing, thus confirming the observations of Dostrowsky [7] (1929). I have also noted that subcutaneous injections of vaccine made with killed L. tropica (3,000,000 to 5,000,000 leishmanias per cubic centimeter given in 0.1 to 0.5 cc. doses at biweekly intervals) in the preulcerative stage of the sores induced early ulceration and favored the speedy healing of the sores (Ray [8] 1935).

6. The preparation used was neostibosan.

7. Dostrowsky, A.: Zur Behandlung der Leishmaniosis cutanea, Arch. f. Schiffs- u. Tropen-Hyg. **33**: 417-423, 1929.

8. Ray, J. C.: Studies on Protozoal Vaccine: I. Oriental Sore Vaccine, Indian J. Pediat. **2**:149-158, 1935.

IMPETIGO BULLOSA IN THE TROPICS

CAPTAIN CHARLES S. D'AVANZO
MEDICAL CORPS, ARMY OF THE UNITED STATES

Impetigo bullosa is one of the dermatologic entities frequently encountered in the tropics. Standard textbooks on dermatology do not convey an adequate description of this disease. Furthermore, previously suggested treatment is not satisfactory management of this disease as manifested in the armed forces in the tropics. The purpose of this paper is to present a practical morphologic description of the disease and an adequate method for its treatment.

INCIDENCE

Of 3,061 men that I examined recently in a survey of the division, impetigo bullosa was present in 32, or 0.7 per cent. The infantry had five times as many cases as the artillery and fifteen times as many as the special troops. It is important to note that the incidence of impetigo bullosa paralleled that of miliaria. Furthermore, the incidence rate of impetigo bullosa had no relationship to that of impetigo contagiosa. The rates are compared in the table.

Incidence of Impetigo Bullosa Correlated with That of Two Other Cutaneous Diseases in Tropic Troops

	Total Number Examined	Per Cent with		
		Impetigo Bullosa	Miliaria	Impetigo Contagiosa
Infantry.....	1,721	1.6	5.4	0.2
Artillery.....	675	0.3	0.9	0.4
Special troops...	665	0.1	1.0	0.5
Total.....	3,061	0.7	2.6	0.3

HOSPITAL ADMISSION

Patients with impetigo bullosa constituted 0.44 per cent of all patients (898) admitted to the nearby evacuation hospital during November and 3.2 per cent of all those with cutaneous diseases (125) admitted during the same period.

ETIOLOGY

The organism commonly associated with the disease is a staphylococcus. However, in the survey reported here other organisms were also found microscopically. It was not possible to make any cultures because there were no laboratory facilities available for the purpose.

The most important factor in impetigo bullosa is perspiration. It cannot be overemphasized. The excessive sweating macerates the normal skin and allows bacteria to gain entrance to the superficial portions of the epidermis. Hence it is readily apparent that the lesions occur in the areas of the body where sweating is most profuse, particularly in the hairy regions and where the cutaneous surfaces come into apposition. It is to be noted that in these regions the skin is thin and has less mechanical resistance.

CHARACTERISTICS

As commonly seen, this disease is characterized by bullous lesions, varying in size from that of a pinhead to that of a dime, arising on the normal skin and surrounded by an erythematous halo. In practically all the cases the disease has an acute onset. The lesions develop rapidly and reach their maturity in less than twenty-four hours. Many new lesions continue to develop daily while the case is under observation.

Impetigo bullosa occurs frequently in the axillas and groins and on the trunk and extremities. It is less common on the face.

The vesicles and bullae vary in elevation from being slightly raised to being well elevated above the normal skin. As a rule they are all sharply demarcated, and each lesion is separate from the other. Coalescence is not frequent. The vesicles and bullae are thin walled and filled with a thin lactescent fluid semipurulent in nature. The contents of the lesions are often easily visible through the semitranslucent wall. Newer lesions and those which have recently reached maturity have a stretched wall, while older lesions have a flaccid wrinkled appearance. The fluid is at first watery and within a few hours becomes cloudy. The demarcation between the watery and lactescent fluid can frequently be seen in the individual bullae through the intact wall. The lesions are fragile and easily ruptured by friction or by contact with clothing. They present a moist glistening surface. The walls of the ruptured bullae rapidly shrink to the outer edges of the lesion and soon form a thin, dry crust. Some patients recover without treatment, but in the majority of cases new lesions continue to develop over a long period.

TREATMENT

Prophylactic.—Personal hygiene is important in preventing the disease. All factors that will minimize or control perspiration will help in prevention, such as frequent bathing, showers, frequent changes of clothing and frequent use of dusting powder on hairy regions and regions where cutaneous surfaces come into apposition. The clothing worn in the tropics should be of light weight and porous.

Such prophylactic measures are particularly important in units that are engaged in manual labor, because of the difficulty in controlling the deleterious effects of excessive perspiration in such troops.

Active.—It cannot be overemphasized that ointments tend to aggravate the eruption. The commonly advised ammoniated mercury ointments are definitely contraindicated, as they tend to macerate the skin further. It has been my experience that the best treatment is to open the lesions, with aseptic precautions, and allow the fluid to drain out. After this, a 2 per cent aqueous solution of gentian violet medicinal or a drying lotion, such as calamine or magnesium carbonate shake lotions, can be used. Dusting powders containing magnesium carbonate, boric acid and purified talc should also be used to keep the lesions dry. I have also found 5 per cent sulfadiazine jelly to be useful. New lesions should be opened daily and the surrounding areas kept clean with the use of soap and water. The treatment should be persistent until all lesions are definitely healed.

SUMMARY

Impetigo bullosa is one of the more common dermatologic entities found among troops in the tropics, particularly in the infantry. The eruption appeared in 0.7 per cent of all troops observed. Most patients with impetigo bullosa were treated in their units satisfactorily. They constituted 0.44 per cent of all admissions and 3.2 per cent of those hospitalized for cutaneous diseases. The most important factor involved in this disease is perspiration. Although it is less frequent, the incidence rate of impetigo bullosa parallels that of miliaria, because the same factors help produce both eruptions. Impetigo bullosa as found in the tropics should be removed from the classification of the impetigo contagiosa group. It is a clinical entity, and sweat is the all-important factor.

The most important part of treatment is prophylaxis. Proper personal hygiene is essential. The commanding officer of the unit has a definite function in prevention and much will depend on him particularly in infantry troops or other troops that do heavy manual labor. Clothing made of light porous material with a coarse weave is recommended for the use of troops in the tropics.

IMPETIGO BULLOSA IN THE TROPICS

CAPTAIN CHARLES S. D'AVANZO
MEDICAL CORPS, ARMY OF THE UNITED STATES

Impetigo bullosa is one of the dermatologic entities frequently encountered in the tropics. Standard textbooks on dermatology do not convey an adequate description of this disease. Furthermore, previously suggested treatment is not satisfactory management of this disease as manifested in the armed forces in the tropics. The purpose of this paper is to present a practical morphologic description of the disease and an adequate method for its treatment.

INCIDENCE

Of 3,061 men that I examined recently in a survey of the division, impetigo bullosa was present in 32, or 0.7 per cent. The infantry had five times as many cases as the artillery and fifteen times as many as the special troops. It is important to note that the incidence of impetigo bullosa paralleled that of miliaria. Furthermore, the incidence rate of impetigo bullosa had no relationship to that of impetigo contagiosa. The rates are compared in the table.

Incidence of Impetigo Bullosa Correlated with That of Two Other Cutaneous Diseases in Tropic Troops

	Total Number Examined	Per Cent with		
		Impetigo Bullosa	Miliaria	Impetigo Contagiosa
Infantry.....	1,721	1.6	5.4	0.2
Artillery.....	675	0.3	0.9	0.4
Special troops...	665	0.1	1.0	0.5
Total.....	3,061	0.7	2.6	0.3

HOSPITAL ADMISSION

Patients with impetigo bullosa constituted 0.44 per cent of all patients (898) admitted to the nearby evacuation hospital during November and 3.2 per cent of all those with cutaneous diseases (125) admitted during the same period.

ETIOLOGY

The organism commonly associated with the disease is a staphylococcus. However, in the survey reported here other organisms were also found microscopically. It was not possible to make any cultures because there were no laboratory facilities available for the purpose.

The most important factor in impetigo bullosa is perspiration. It cannot be overemphasized. The excessive sweating macerates the normal skin and allows bacteria to gain entrance to the superficial portions of the epidermis. Hence it is readily apparent that the lesions occur in the areas of the body where sweating is most profuse, particularly in the hairy regions and where the cutaneous surfaces come into apposition. It is to be noted that in these regions the skin is thin and has less mechanical resistance.

CHARACTERISTICS

As commonly seen, this disease is characterized by bullous lesions, varying in size from that of a pinhead to that of a dime, arising on the normal skin and surrounded by an erythematous halo. In practically all the cases the disease has an acute onset. The lesions develop rapidly and reach their maturity in less than twenty-four hours. Many new lesions continue to develop daily while the case is under observation.

Impetigo bullosa occurs frequently in the axillas and groins and on the trunk and extremities. It is less common on the face.

The vesicles and bullae vary in elevation from being slightly raised to being well elevated above the normal skin. As a rule they are all sharply demarcated, and each lesion is separate from the other. Coalescence is not frequent. The vesicles and bullae are thin walled and filled with a thin lactescent fluid semipurulent in nature. The contents of the lesions are often easily visible through the semitranslucent wall. Newer lesions and those which have recently reached maturity have a stretched wall, while older lesions have a flaccid wrinkled appearance. The fluid is at first watery and within a few hours becomes cloudy. The demarcation between the watery and lactescent fluid can frequently be seen in the individual bullae through the intact wall. The lesions are fragile and easily ruptured by friction or by contact with clothing. They present a moist glistening surface. The walls of the ruptured bullae rapidly shrink to the outer edges of the lesion and soon form a thin, dry crust. Some patients recover without treatment, but in the majority of cases new lesions continue to develop over a long period.

TREATMENT

Prophylactic.—Personal hygiene is important in preventing the disease. All factors that will minimize or control perspiration will help in prevention, such as frequent bathing, showers, frequent changes of clothing and frequent use of dusting powder on hairy regions and regions where cutaneous surfaces come into apposition. The clothing worn in the tropics should be of light weight and porous.

Such prophylactic measures are particularly important in units that are engaged in manual labor, because of the difficulty in controlling the deleterious effects of excessive perspiration in such troops.

Active.—It cannot be overemphasized that ointments tend to aggravate the eruption. The commonly advised ammoniated mercury ointments are definitely contraindicated, as they tend to macerate the skin further. It has been my experience that the best treatment is to open the lesions, with aseptic precautions, and allow the fluid to drain out. After this, a 2 per cent aqueous solution of gentian violet medicinal or a drying lotion, such as calamine or magnesium carbonate shake lotions, can be used. Dusting powders containing magnesium carbonate, boric acid and purified talc should also be used to keep the lesions dry. I have also found 5 per cent sulfadiazine jelly to be useful. New lesions should be opened daily and the surrounding areas kept clean with the use of soap and water. The treatment should be persistent until all lesions are definitely healed.

SUMMARY

Impetigo bullosa is one of the more common dermatologic entities found among troops in the tropics, particularly in the infantry. The eruption appeared in 0.7 per cent of all troops observed. Most patients with impetigo bullosa were treated in their units satisfactorily. They constituted 0.44 per cent of all admissions and 3.2 per cent of those hospitalized for cutaneous diseases. The most important factor involved in this disease is perspiration. Although it is less frequent, the incidence rate of impetigo bullosa parallels that of miliaria, because the same factors help produce both eruptions. Impetigo bullosa as found in the tropics should be removed from the classification of the impetigo contagiosa group. It is a clinical entity, and sweat is the all-important factor.

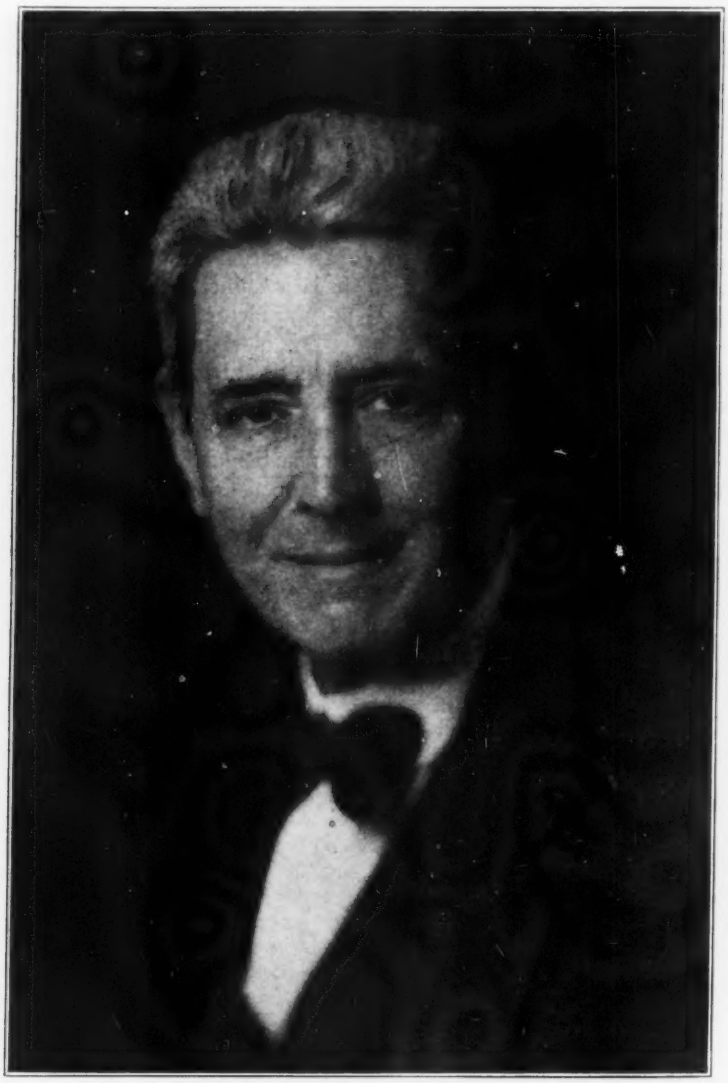
The most important part of treatment is prophylaxis. Proper personal hygiene is essential. The commanding officer of the unit has a definite function in prevention and much will depend on him particularly in infantry troops or other troops that do heavy manual labor. Clothing made of light porous material with a coarse weave is recommended for the use of troops in the tropics.

Obituaries

RALPH HOPKINS, M.D.

1876—1945

On March 7 there died in New Orleans a distinguished colleague and a friend of long standing. He had known the nature of his mortal illness since the previous autumn, but in his determined way neither his industry in his professional work nor his consuming interest in his work among the lepers abated the least. Up until a few weeks before his death he led his usual calm and well ordered life, keeping what appointments he could and not failing to make his weekly visit to Carville. Four years before, he had retired from his active teaching duties at Tulane, and, missing the stimulating contact with his students, he had redoubled his work in practice and study.



RALPH HOPKINS, M.D.
1876-1945

Ralph Hopkins represented the interesting mixture of Scottish, English and French blood. His father, Aristide Hopkins, a cotton broker and ex-Confederate officer, was one of the few men in the combined families not a physician.

His mother, Mary McNeil, came from a well known family most of whose men were in medicine. His early preparatory school work was done in the Dyer School in New Orleans, and his college was that of the Hopkins' family—Georgetown. Here he graduated, after a broad classical course, in 1895, with an A.B. degree. He then entered the Medical Department of the Tulane University of Louisiana and was graduated in 1899. His primary interest was physiology, and his first appointment was as instructor in that department in 1901. Early association with Dr. Isadore Dyer precipitated an additional interest in dermatology through the circumstance of an appointment as attending physician to the Louisiana State Leper's Home, now the National Leprosarium at Carville, in 1901. This single association was to last forty-four years, or until the time of his death.

After a term of graduate study at the New York Post-Graduate Medical School and Hospital he became Chief of Clinic and assistant clinical instructor in diseases of the skin at Tulane in 1905. During the next twenty years he maintained a dual connection with the school, becoming assistant professor of physiology in 1917, assistant professor of diseases of the skin in 1921 and then associate professor of physiology; on his appointment as associate professor of dermatology, in 1924, he resigned from the department of physiology. During these years he was closely associated with the clinics of the New Orleans hospitals, notably Charity Hospital. In 1926, after the retirement of Dr. Henry Menage, he became professor and head of the department at both Tulane and Charity.

He was commissioned a captain in the Medical Corps of the Army in January 1918 and, after being stationed at Camp Jackson, Miss., went overseas with the Thirty-First Engineers. He remained in France months after the Armistice, engaged in important liaison work, for which his facility with the language and his ability to deal with the French made him invaluable. On his return he resumed his teaching, his practice and his activity which he valued most, his work among the lepers at Carville.

He was married at Biloxi, Miss., on Aug. 11, 1909, to Marian Gayle Denegre and became the father of three sons and three daughters. The home life of the Hopkins was always one of close association and meant much to him; he had already given up the yachting of his younger years and, with the exception of his membership in his single club, preferred to spend his leisure with his growing family. By nature he was distinctly social and hospitable, although his manner was diffident and retiring. Those who attended the meetings held in New Orleans in 1932 and 1941 will have cause to remember him as a gracious and charming host.

In addition to his memberships in the local parish and state societies, he had been president of the Louisiana State Dermatological Society and vice president of the American Dermatological Association. He was also a member of the Southern Medical Association and the American Society of Tropical Medicine. He had served as editor of the *New Orleans Medical and Surgical Journal*. In his later years he dropped most of his local club memberships, retaining only that in the Boston Club of New Orleans, where it was his unfailing custom to lunch daily. His publications were about equally divided between physiology and dermatology, and of the latter the greatest number were concerned with leprosy. Scientifically Dr. Hopkins will long be remembered for his forty-five years of active association with and interest in leprosy; for his pioneering in the use of chaulmoogra oil in treatment and his investigations in lepra fever.

R. L. G.

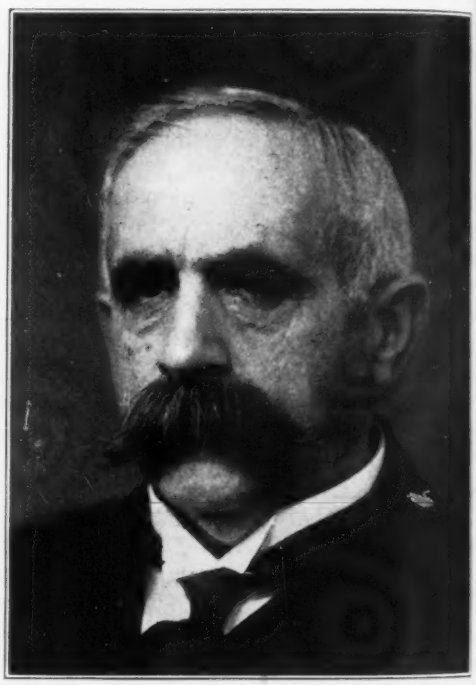
ABRAHAM BUSCHKE, M.D.

1868-1943

We have learned with deep sorrow that Abraham Buschke, a dermatologist of unusual gifts and brilliant ideas, died two years ago in Theresienstadt (Czechoslovakia). His wife, his faithful companion of many years, was released from that vast concentration camp and permitted to enter Switzerland a few weeks ago. She brought news of his death.

Abraham Buschke was born in Nakel (Posen) and studied medicine in Breslau, Berlin and Greifswald. It was here, in 1894, that he and Busse described the first case of European blastomycosis (cryptococcosis or torulosis). From that time dated his great interest in mycology. In 1895 he became assistant at Neisser's clinic in Breslau, and in 1897, at Lesser's clinic in Berlin. In 1900 he was appointed instructor in dermatology at the Friedrich Wilhelm University, Berlin; in 1908 he received the title of professor. In 1904 he was made chief of the dermatologic department of the Hospital am Urban (Berlin), and in 1906 he assumed the same position at the Virchow Hospital (Berlin), which he held until 1933. In 1937, when he visited the United States, he impressed many dermatologists in New York with his strong personality and his independent way of thinking.

Utilizing the immense dermatologic material (four hundred beds for dermatologic patients) at his disposal, he almost overwhelmed students in class with all phases and aspects of the subject under discussion. A great number of papers on dermatologic problems were published by him alone or in collaboration with his assistants. Many of these papers dealt with the significance of the skin for immunity in syphilis (1929, with A. Joseph and with B. Peiser) and with the influence of arsphenamine on this immunity. He was a keen observer and described new dermatologic entities, such as scleredema adultorum (1902), keratoderma maculosa disseminata symmetrica (1910, with H. Fischer) and dermatofibrosis lenticularis disseminata (1928, with Helen Ollendorff). Many years before Cicero advocated the use of thallium for tinea capitis, Buschke had studied the effect of thallium on rats. Social aspects of venereal disease, especially in children, were discussed by him and M. Gumpert. He did not stay within the narrow concept of orthodox dermatology but sought help for the solution of perplexing skin problems in other fields, such as anthropology and chemistry. Even homeopathy came in for some share of his attention when he (in 1921, with Freymann, and in 1923, with Sklarz) tried to explain lichenoid arsphenamine dermatitis as



ABRAHAM BUSCHKE, M.D.
1868-1943

caused by the same agent which would cure lichen planus.

His assistants loved his great vitality, although it was not always easy for them to work out to his satisfaction dermatologic problems which he handed them in the morning in the form of cryptic notes scribbled down during the night.

Besides his widow, three sons survive him: Franz Buschke, M.D., Albrecht Buschke and William Buschke, M.D. All three reside in the United States.

WILLIAM CURTH, M.D., and
HELEN O. CURTH, M.D.

Correspondence

ERYTHEMA NODOSUM IN THE EIGHTEENTH CENTURY

The Case of the Child Mozart

To the Editor:—The belief has often been voiced that Wolfgang Amadeus Mozart (1756-1791), one of the greatest musical geniuses of all times, suffered from tuberculosis of the lungs. This opinion is based on such meager evidence as the belief of one of his first biographers, G. N. von Niessen,[1] who married Mozart's young widow, or on the vaguely noted observations that Mozart was a sickly child, that he often suffered from colds and catarrh and that he was always tired and close to exhaustion.[2] The cause of his early death, according to the death certificate, was "miliary fever." However, according to a medical expert of the early nineteenth century, it was "meningitis,"[2b] and according to J. Barraud,[3] who in the early twentieth century collected all the data available on the symptoms and signs of Mozart's last illness, it was Bright's disease. The story that Mozart died from meningitis was built up in defense of Salieri, the composer's great enemy, who was more or less openly accused of having poisoned Mozart. But it seems highly improbable that meningitis was the cause of Mozart's death, because he did not lose consciousness until shortly before death, according to the statements of several eyewitnesses.[2b] More than that, he stopped work on his "Requiem" only four hours before he died.[2b] Hence, one cannot decide, on the basis of available data, whether or not Mozart ever suffered from tuberculosis or from what disease he died.

It is interesting to note, in any case, that the child Mozart had a typical attack of erythema nodosum when he was 6 years 9 months old. This diagnosis is deduced from a detailed description of that disease by his father, Leopold Mozart, titular court composer of the archbishop's orchestra in Salzburg, Austria. The illness occurred during the second concert tour made by the Mozart family. The party included the father, the mother and the two children. The trip began Sept. 18, 1762. The weather was rainy and windy all the time. Because of the interruptions of travel, it took two and a half weeks for the family to go from Salzburg to Vienna. In Linz, Wolfgang had "catarrh." But otherwise, "in spite of all irregularities and in spite of rain and wind, he remained healthy, thank God" (letter of L. Mozart to L. Hagenauer, Vienna, Oct. 16, 1762).[4] Five days after this report by Mozart's father and after Wolfgang was introduced with great success at the Imperial Court of the Empress Maria Theresa, the child suddenly became sick.

The letter in which Leopold Mozart describes his son's disease was dated Vienna, Oct. 30, 1762, and was addressed to his landlord and friend, Lorenz Hagenauer, to whom he faithfully reported all the great and small events of the concert tour. The English translation reprinted here is in great part copied from Emily Anderson's excellent book.[5] I have deviated from her translation in a few places where I felt that a more literal interpretation might be advantageous in considering Mozart's medical history. In part, the letter reads: "Many a slip between cup and lip. I was beginning to think that for 14 days in succession we were far too happy. God has sent us a small cross, and we must thank His infinite goodness that things have turned out as they have. At 7 o'clock in the evening of the 21st we again went to Her Majesty, the Empress.

"Our Woferl, however, was not quite as well as usual, and before we drove there and later when he went to bed he complained of his—I beg your pardon—buttocks and hips. When he got into bed, I examined the places where he said he had pain and found several spots as large as a kreutzer,[6] very red and slightly raised and painful to touch. These spots were present only on the shins, on both elbows and a few of them on the buttocks; altogether, they were very few. He was feverish, and we gave him black powder[7] and a margrave powder[8] but he had a rather restless night. On Friday we repeated the powders both morning and evening and we found that the spots had spread but although they were larger, they had not increased in number. We had to send messages to all the nobles, with whom we had engagements for the next eight days, and had to cancel them day after day. We continued to give margrave powders, and on Sunday Woferl began to perspire, as we wanted him to, for hitherto his fever had been rather dry. I met the physician of the Countess von Zinzendorf (who happened to be out of town) and gave him particulars. He at once came back with me and approved of what we had done. He said it was a kind of scarlet fever rash.

"Thank God, he is now so well that we hope that if not to-morrow, his nameday, at least on the day after to-morrow he will get up for the first time. . . . Meanwhile this affair has cost me fifty ducats at least[9] . . . . But I am infinitely grateful to God that it has turned out so well. These scarlet fever spots which are a fashionable complaint for children in Vienna, are dangerous and I hope that Woferl has now become acclimatised. . . . . I beg you to use every effort to ascertain what His Grace[10] will do eventually and what hopes I may entertain of the post of Vice-Kapellmeister. . . ."

1. von Niessen, G. N.: Biographie W. A. Mozarts, Leipzig, Breitkopf and Härtel, 1828.

2. (*a*) Jahn, O.: W. A. Mozart, ed. 3, Leipzig, Breitkopf and Härtel, 1891, vol. 2, pp. 637-647. (*b*) Schurig, A.: Wolfgang Amadeus Mozart, Leipzig, Breitkopf and Härtel, 1923, vol. 2, pp. 371-379.

3. Barraud, J.: A quelle maladie a succombé Mozart? Chron. méd. **12**:737, 1905.

4. Schurig,[2b] vol. 1, p. 115.

5. Anderson, E.: The Letters of Mozart and His Family, New York, The Macmillan Company, 1938, vol. 1, p. 12.

6. A coin of penny size.

7. Pulvis epilepticus niger, a common remedy at that time against all kinds of disorders (footnote of E. Anderson[5]).

8. A remedy discovered by the German chemist Andreas Sigismund Markgraf, 1709-1782 (footnote of E. Anderson[5]).

9. The income lost by performances the child prodigy was unable to give.

10. The Archbishop of Salzburg, Hieronymus Count of Colloredo (1732-1812).

As one can see, Leopold Mozart, a greedy and pedantic little man, gave a precise and careful description of his son's disease. The sudden onset and short duration of the eruption, the exclusive localization of the red raised spots on shins, buttocks and elbows and the tenderness of the lesions are so characteristic of erythema nodosum that the reader, if he happens to be a twentieth century dermatologist, will hardly have any doubt about what the correct diagnosis should have been. One finds it intriguing, also, to note that the high ranking physician to whom Leopold Mozart felt very much obligated,[11] misdiagnosed this eruption as "a kind of scarlet fever rash." But nobody should blame him for not having diagnosed erythema nodosum, as this syndrome was first mentioned in medical literature forty-six years later in Robert Willan's famous classification of cutaneous diseases.[12]

Those who agree with Wallgren,[13] Feer,[14] Kundratitz[15] and other pediatricians that erythema nodosum in small children always represents a manifestation of the generalization phase of tuberculosis may conclude that Wolfgang Amadeus Mozart went through this phase of tuberculosis when he was not yet 7 years old.

STEPHEN ROTHMAN, M.D., Chicago.

University of Chicago.

IMMUNIZATION THERAPY OF WARTS

To the Editor:—In reply to the letter of Brigadier G. M. Findlay, kindly forwarded to me on May 23, 1945, I should like to make the following remarks:

1. As I clearly stated in my paper, I referred to Dr. Findlay's publication, relying on the citations of it by Dr. Rulison in his paper (ARCH. DERMAT. & SYPH. **46**:66 [July] 1942. The latter wrote (p. 77): "Findlay stated that warts of one species are not transferable to another and that their extracts have no curative effect in different species." If there is a misrepresentation in my paper, I should be excused to a certain degree, in view of the fact that the statement attributed by Dr. Rulison to Dr. Findlay in 1942 had been left uncontested until now. Nevertheless, I can only express my regret for not having consulted the original before.

2. However, Rulison's interpretation of Findlay's statements becomes understandable, even if we quote directly from Dr. Findlay's monograph (Findlay, G. M., in Andrewes, F. W.; Arkwright, J. A., and others: A System of Bacteriology in Relation to Medicine, Medical Research Council, London, His Majesty's Stationery Office, 1930, vol. 7, p. 252). On page 257 of the original text are found the following statements: "Serra (1924) was unable to infect laboratory animals with human warts. Ullmann (1923) claims to have produced a papilloma in the vagina of a bitch by inoculation with laryngeal papilloma. The writer has been unable to confirm these results. Dog warts failed to infect man, rabbits, mice and guinea pigs, as did bovine warts. Human warts were not infective for dogs, rabbits, rats, mice or guinea pigs." In his letter Dr. Findlay refers to this as follows: "At the time this was written, this was a fair summary of the position, since the experiments of Frank Schultz (1908) are entirely uncritical." Thus he confirms rather than refutes Dr. Rulison's interpretation of his statements and results.

3. With regard to the second part of Rulison's quotation, I concede that Findlay did not mention that he had used a vaccine. However, he used an immune serum, the results of which point in the direction of the same conclusions which Dr. Rulison ascribed to Dr. Findlay, whom I now quote (p. 257): "The writer found that after inoculating himself with three crops of warts, he became immune to further inoculations. The serum, however, had no antiviral properties, but after hyperimmunization acquired them. Dogs are also capable of producing an antiviral wart serum, but serum which acts on human warts has no action on dog warts and vice versa." This shows that even though Dr. Findlay did not express an opinion about specific active immunization he expressed an opinion about passive immunization to the effect that an immune serum for warts of one species did not act on warts of another species. This may explain the remark by Dr. Rulison, who erroneously referred to an extract instead of an immune serum.

4. I disagree with Dr. Findlay when he calls the publication of Frank Schultz (*Deutsche med. Wchnschr.* **34**:423, 1908) "entirely uncritical." This, in my opinion, is an unjustified criticism. Schultz's article gives well selected literary references and (with minute details) the description of an experiment made with material from cattle warts by J. Jadassohn on 3 of his assistants, 1 of whom was Frank Schultz. The warts which developed at the sites of inoculation were described in detail, both clinically and histologically. This experiment (in addition to several clinical observations) is more decisive as to whether warts are transferable from one species to another than many negative results, such as Dr. Findlay's and my own. Therefore, I cannot agree with Dr. Findlay's summary of the situation at the time (1930) that his paper was written.

HANS H. BIBERSTEIN, M.D., New York.

667 Madison Avenue (21).

11. His professional fee, rather splendid, was a concert given by Wolfgang in the doctor's home. (Letter of L. Mozart to L. Hagenauer, Vienna, Nov. 6, 1762, reported by Schurig,[2b] vol. 1, p. 119.)

12. Willan, R.: On Cutaneous Diseases, London, J. Johnson, 1808 vol. 1.

13. Wallgren, A.: Considerations sur l'erythème noueux, Acta pædiat. **5**:225, 1926.

14. Feer, E.: Zur Atiologie des Erythema nodosum, Schweiz. med. Wchnschr. **56**:682, 1926.

15. Kundratitz, K.: Zur Frage der Atiologie des Erythema nodosum, Jahrb. f. Kinderh. **113**:155, 1926.

CORRECTION

In the abstract of "A Case for Diagnosis (Acquired Localized Trichorrhexis; [Trichoclasis]; Keratosis Pilaris?)" by Dr. Francesco Ronchese, presented before the New England Dermatological Society at its Feb. 9, 1944 meeting, which appears in the June 1945 issue of the ARCHIVES (ARCH. DERMAT. & SYPH. **51**:412, 1945), the last line of the legend for the illustration on page 413 should read: "wavy epidermis, hyperkeratosis, indentations and absence, *or* atrophy, of coil and sebaceous glands."

Abstracts from Current Literature

EDITED BY DR. HERBERT RATTNER

NEVUS FLAMMEUS ASSOCIATED WITH CONJUNCTIVAL TELANGIECTASIA AND POSSIBLE EARLY CHOROIDAL TUMOR. EMANUEL ROSEN, Am. J. Ophth. **27**:1143 (Oct.) 1944.

The author reports on a nevus flammeus involving the left side of the face and neck. Besides these cutaneous regions of vascular involvement, there was telangiectasia of the left side of the palate and posterior tonsillar wall. The lower lid exhibited a conjunctival structure that was extremely red, and the bulbar conjunctiva had an increased formation of tortuous and racemose vessels. A small white plaque just above the disk was seen on ocular examination.

In the discussion the author points out that a nevus of the face apparently involves the first two branches of the trigeminus nerve and that any structure supplied by this nerve may be involved. The object of the report was to stress the clinical importance of nevi and telangiectases so that patients may be referred to the proper specialist, by whom the presence of nevoid anemia, familial combined hemangioma of the cerebellum and retina and hemangiomas may be detected.

STRAKOSCH, Denver.

POLYARTICULAR ARTHRITIS AND OSTEOMYELITIS DUE TO GRANULOMA INGUINALE. J. LYFORD III, R. B. SCOTT and R. W. JOHNSON JR., Am. J. Syph., Gonor. & Ven. Dis. **28**:588 (Sept.) 1944.

Three patients with polyarticular arthritis and osteomyelitis caused by granuloma inguinale are reported on by Lyford, Scott and Johnson. In the first patient there occurred a systemic dissemination of the disease with massive polyarticular arthritis and ultimately ulceration of many of the joints and a widespread destruction of the bones. In the second patient there was involvement of two vertebrae and a hip joint, communicating with sinus tracts presenting in the inguinal region. In the third patient lesions developed in the bones of a hand and forearm but no involvement of the joints was observed.

The course of disease in these patients adds further proof that granuloma inguinale can be a systemic as well as a local disease. No satisfactory explanation for the mode of spread of the Donovan bodies within the host could be given in these instances, but the massive involvement of the bones and joints in 1 patient suggest that the spread could be hematogenous.

The fact that no member of any of these patients' families had granuloma inguinale suggests that infection involves more than mere contact with material from an active lesion.

REUTER, Milwaukee.

EFFECT OF 3,4-BENZPYRENE ON REGENERATING EPIDERMIS OF MICE. MARTIN SILBERBERG and RUTH SILBERBERG, Arch. Path. **38**:215 (Oct.) 1944.

Silberberg and Silberberg report on experimental studies which showed that benzene applied to regenerating epidermis of mice accelerated healing of wounds and that the migration of cells into the defect along with intensification of proliferation was hastened. When benzpyrene in benzene was applied in a similar manner, the epithelization of the wounds was not hastened to the same extent as the proliferation of the cells. While cells were abundant, they failed to migrate into the defect at a rate commensurate with their increased multiplication.

THE RELATION OF CHEMICAL STRUCTURE IN CATECHOL COMPOUNDS AND DERIVATIVES TO POISON IVY HYPERSENSITIVENESS IN MAN AS SHOWN BY THE PATCH TEST. HARRY KEIL, DAVID WASSERMAN and CHARLES R. DAWSON, J. Exper. Med. **80**:275 (Oct.) 1944.

In a previous study Keil corroborated the experimental work of Landsteiner and Jacobs demonstrating a relation between the cutaneous response to poison ivy extract and 3-geranyl catechol. In this report Keil, Wasserman and Dawson present evidence based on patch tests in support of the view that the active ingredient in poison ivy is a catechol derivative with a long, unsaturated side chain in the 3 position. The position of the side chain in the catechol configuration has some bearing on the degree and incidence of group reactions in persons hypersensitive to poison ivy. The group reactions discussed in this paper relate only to those resulting from the various catechol and veratrol compounds. Preliminary studies by the authors indicate that this sensitiveness extends to other phenolic derivatives.

LYNCH, St. Paul.

THE PRINCIPLES OF PERCUTANEOUS ABSORPTION. STEPHEN ROTHMAN, J. Lab. & Clin. Med. **28**:1305 (Aug.) 1943.

This review covers the literature of the years from 1920 to 1942. From the available data the following conclusions were drawn:

Overton's rule, which postulates that lipid-soluble substances enter the living cells and that lipid-insoluble substances do not is largely valid as far as percutaneous absorption is concerned. The impermeability of the skin to water and electrolytes is caused neither by the presence of a greasy or waxy cover of the skin nor by the presence of the horny layer. The barrier to absorption is to be found in the transitional layers between cornified and noncornified epithelium, in the stratum granulosum and the stratum lucidum, which represent an electric double layer with positive hydrogen ions on the outside and negative hydroxyl ions on the inside. The presence of appendages in the skin complicates the mechanism of percutaneous absorption mainly because any substance may penetrate into the follicular canal and reach the duct of the sebaceous glands and from there the gland cells, thus avoiding the passage through a stratified epithelium and directly contacting cells whose permeability is higher than that of the granular layer of the epidermis. If there is any absorption of lipid-insoluble electrolytes, the route is through the appendages. Ointments are helpful in bringing the incorporated substances closer to the sur-

face of absorbing cells; this task is the more easily performed the more supple the ointment is. However, there is no evidence that either ointments or any other kind of "vehicle" may serve as a transportation vehicle into the cell itself. Choosing a substance to which the skin is completely impermeable, one will be unable to enforce absorption with any kind of ointment. Lipid solvents, however, such as ether and chloroform, enhance the permeability of the skin by disintegrating the lipid frame of the cells and thus create nonphysiologic conditions. Similarly, saponins, which precipitate the cholesterol, will break up the barrier to cutaneous absorption.

With the use of galvanic current to introduce substances into the skin under the usual conditions of medical electrophoresis, the absorption through appendages will be tremendously increased but the impermeability of the epidermis will remain unchanged. Under extreme conditions the electrophoretically introduced substances will penetrate through the follicular wall sideways and enter the epidermal cells from there, but the surface epithelium will not be broken through.

ROTHMAN, Chicago.

COTTON HOSE AS A VEHICLE FOR A FUNGICIDE IN TREATMENT OF ATHLETE'S FOOT. PHOEBE J. CRITTENDEN and LUELLA S. JOINER, J. Lab. & Clin. Med. **29**:606 (June) 1944.

This is a report on a preliminary study of the treatment of dermatophytosis, the results of which were promising. The duration of infection varied from a few days to twenty or more years. The good results reported in the treatment of fungous infection of hands and feet with copper sulfate administered iontophoresis led the authors to the idea of impregnating cotton hose with the fungicide, since it brought the fungicide into close contact with the feet while walking and with the shoe lining, which is a frequent source of reinfection.

The authors noted that a 5 per cent solution of copper sulfate reduced the effect of the fungi, but it proved to be irritating to the skin in warm weather. Copper acetate was found to be less irritating than copper sulfate and was substituted for it in treatment of patients not responding satisfactorily to the latter. The itching was usually relieved within a week. The shoes were not damaged.

The hose were changed daily. The soiled hose were soaked in tap water at 70 C. for thirty minutes. They were then washed in soap suds, rinsed and dried. The clean dry hose were soaked for thirty minutes in a 5 per cent solution of copper at 40 C. and then wrung through an ordinary clothes wringer set loosely but giving enough pressure so that the solution was evenly spread throughout the hose without dripping.

THE ADJUVANT EFFECT OF AEROSOL UPON THE GERMICIDAL ACTION OF CADMIUM CHLORIDE. ARTHUR F. COCA, J. Lab. & Clin. Med. **29**:689 (July) 1944.

In his experiments to demonstrate the enhancement of fungicidal action of a fungicidal agent through the admixture of an adjuvant, the investigator used a proved germicide, cadmium chloride, and a well known wetting agent, aerosol OT (sodium dioctyl sulfonsuccinate). In making these selections the following pertinent factors were considered: 1. The fungicidal agent should be one of relatively low toxicity and nonirritative to the cutaneous tissues. 2. It should be able to penetrate into cutaneous tissues and into infective fungi. If the agent itself does not possess the property of diffusion, a nonirritative adjuvant should be added. 3. The agent or mixture must be applied in such a manner as to allow it sufficient time for effective penetration of infective tissues and fungi.

The results showed that cadmium chloride alone in concentrations of 0.5 and 0.25 per cent in 20 per cent alcohol was incapable of sterilizing suspensions of the micro-organism used in the tests, whereas the aerosol in the same solvent failed to kill micro-organisms in concentrations of 0.0625 per cent. The same two concentrations of cadmium chloride did sterilize the suspension when mixed with the aerosol in concentrations as weak as 1:256 and 1:64 respectively. The experiments were performed with a constant quantity of well shaken suspension of Monilia albicans filtered through a silk fabric.

GELBER, Los Angeles.

ROLE OF INOSITOL IN ALOPECIA OF RATS FED SULFASUXIDINE. EDWARD NIELSEN and A. BLACK, Proc. Soc. Exper. Biol. & Med. **55**:14 (Jan.) 1944.

Inositol, 5 mg. six days weekly, succeeded in curing rats of alopecia produced by the administration of sulfasuxidine in addition to a synthetic diet believed to be complete nutritionally. From the beginning of the time inositol was incorporated in the diet, the growth was better, and the fur coat was smooth, with normal luster.

EXPERIMENTS ON THE TOXICITY OF THE CALCIUM SALT OF PENICILLIN. PAUL GYÖRGY and P. C. ELMES, Proc. Soc. Exper. Biol. & Med. **55**:76 (Jan.) 1944.

Freeze-dried calcium salts of penicillin were found to be no more toxic to mice than the sodium salt of penicillin. The dose employed in some of these experiments was approximately fifty times as great in proportion to body weight as the daily dose of sodium salt used at present in human therapeutics. No toxic signs developed when the calcium salts were administered to a human subject. The authors conclude that satisfactorily purified calcium salt of penicillin is not more toxic to human beings or mice than its sodium salt.

HANSEN, Galveston, Texas.
[AM. J. DIS. CHILD.]

DISTURBANCES OF VISUAL ADAPTATION AND THEIR CLINICAL SIGNIFICANCE. CHARLES SHEARD, H. P. WAGENER and L. A. BRUNSTING, Proc. Staff Meet. Mayo Clin. **19**:525 (Nov. 1) 1944.

In the skin vitamin A is concerned with the process of keratinization. In conditions caused by long-standing deficiency of vitamin A the skin becomes dry and hyperkeratotic. These changes are evident microscopically as follicular hyperkeratosis, parakeratosis and dyskeratosis. In some patients with keratosis pilaris and in some with certain rare familial dyskeratotic diseases of the skin, such as pityriasis rubra pilaris and keratosis follicularis, there is collateral evidence of a disturbance of the metabolism of vitamin A.

In the study of patients with cutaneous diseases possibly associated with a disturbance in the metabolism of vitamin A, there are three approaches to be made to accurate diagnosis, namely, (1) measurement of the threshold of dark adaptation, (2) measurement of the

level and the tolerance curve of vitamin A in the blood and the feces and (3) estimation of clinical response to therapy consisting in the ingestion or injection of vitamin A.

TROPICAL ANIDROTIC ASTHENIA. STUART D. ALLEN and J. P. O'BRIEN, M. J. Australia **2**:335 (Sept. 23) 1944.

Tropical anhidrotic asthenia is a clinical syndrome observed in tropical areas among troops who have suffered from miliaria rubra and is characterized by anhidrosis, changes in the skin and enlargement of the axillary and the inguinal lymph nodes, with symptoms of exhaustion occurring in the heat. Complete recovery usually takes place in six to twelve weeks.

Characteristic cutaneous changes are present. On the forehead and face sweating may be profuse. The palms and soles and perhaps the axillas are normally moist. But for these exceptions the body is completely devoid of sweat and the skin is perfectly dry. On the trunk and the extremities the skin is coarser than normal. On close inspection the affected skin is seen to be studded with innumerable grayish white papule-like elevations about 1 mm. in diameter. When one of the elevations is pricked with a needle, a minute drop of watery fluid may be obtained.

On the basis of histologic study of the abnormal skin it is considered that occluding hyperkeratosis surrounding the sweat duct as it emerges on the surface of the stratum corneum is responsible for this syndrome. The hyperkeratosis is a result of previously occurring miliaria rubra.

HENSCHEL, Denver.

OBSERVATION OF SKIN DISEASES IN THE TROPICS. JAMES R. DELANEY, U. S. Nav. M. Bull. **42**:1117 (May) 1944.

Cutaneous lesions among personnel engaged in battle operations in the South Pacific were common enough to result in the loss of an enormous number of man hours.

Fungous infections, the most common type of disease, involved 80 per cent of all personnel and varied from mild dermatophytosis to secondarily infected dermatophytid. Miliaria, which affected the second largest number of men, varied from mild localized lesions to involvement of almost the entire cutaneous surface. Ulcers of the skin, which occurred frequently, were located on the lower extremities and were caused by trauma, infection, contact or allergy or a combination of such factors. Irritation from soap was also common, owing to the inability to remove the soap because of the scarcity of bathing facilities.

YAWS. HAROLD A. LYONS, U. S. Nav. M. Bull. **42**: 1168 (May) 1944.

Yaws is rare in the white race; nevertheless, an increased incidence may be expected as a result of contact precipitated by the present war.

The author reports a case in which the disease was contracted by a medical officer on duty in a native clinic for the treatment of yaws on one of the Solomon Islands. The initial lesion started at the site of an insect bite on the finger, followed shortly afterward by a maculopapular eruption on the trunk. Dark field examination revealed spirochetes resembling Treponema pertenue, and a Kahn test of the blood gave a 4 plus reaction. Healing was rapid after a course of treatments with a bismuth compound.

COCCIDIOIDOMYCOSIS. PAUL MICHAEL, RICHARD F. MCLAUGHLIN and PHILLIP L. CENAC, U. S. Nav. M. Bull. **43**:122 (July) 1944.

The authors report a case of coccidioidomycosis with a latent period of seven years unsuccessfully treated with 3,081,000 units of penicillin, administered both intravenously and intrathecally. Sulfadiazine administered for six days in adequate dosage also failed to produce any improvement in the patient's condition.

RODIN, South Bend, Ind.

IMPETIGO CONTAGIOSA CURED BY FEVER. OSCAR GREEN, U. S. Nav. M. Bull. **43**:136 (July) 1944.

Impetigo contagiosa involving the lips healed in five days following a temperature of 104.2 F. during an attack of malaria. Natural or induced fever, the author suggests, may be of possible therapeutic value for this disease.

ACTION OF ELECTRIC BLANKETS. G. MALCOLM BROWN and K. MENDELSSOHN, Brit. M. J. **1**:390 (March 18) 1944.

The electric blanket has advantages which recommend it for certain clinical conditions. It is safe and causes no discomfort at ordinary heating rates. There is less risk of burns than with the radiant-heat cradle, and little supervision is required. It occupies little space and is almost fool proof. The most important disadvantages are the long delay before maximum temperature is reached and the lack of variability of control. The electric blanket acts by conduction of heat to the patient. It raises the body temperature only half as quickly as the radiant heat cradle, even when the bed is previously warmed.

SHAW, Chattanooga, Tenn.

PHEMERIDE: A NEW ANTISEPTIC DETERGENT. C. N. ILAND, Lancet **1**: 49 (Jan. 8) 1944.

Phemeride (paratertiaryoctylphenyldiethoxybenzyldimethyl ammonium chloride) probably acts as an antiseptic by disrupting or interfering with the functions of the bacterial cell membrane.

The material was obtained as a white powder without odor which dissolved readily in water and alcohol. A small series of clinical tests were made. Laboratory and clinical tests suggested that phemeride is inhibitory to the common pathogens in dilutions not toxic to the tissues.

LANGMANN, New York. [Am. J. Dis. Child.]

HERPETIC STOMATITIS IN INFANTS AND CHILDREN. T. F. MCNAIR SCOTT, Proc. Roy. Soc. Med. **37**: 310 (May) 1944.

There is a common stomatitis occurring among infants and young children that has been called by many names, such as aphthous, membranous, ulcerative or Vincent's stomatitis. The disease is due to a primary infection with the virus of herpes simplex and hence can be called herpetic stomatitis. The clinical picture of the disease is as follows: It attacks children be-

tween the ages of 1 and 6 years; the onset is sudden, with fever (the temperature may reach 105 F.), anorexia and general malaise. It lasts from seven to fourteen days. The local manifestations are as follows: 1. The gums are red and spongy. 2. Shallow, yellowish, painful ulcers appear on the tongue and buccal mucous membranes, as a result of ruptured vesicles. 3. The regional lymph nodes are enlarged. 4. There is a marked oral factor. There are two main types of the disease, primary and recurrent. Complications consist of (1) dehydration, (2) impetiginization of accompanying labial herpes and (3) paronychia in thumb suckers. Tests are described in the article to show the herpetic etiology of the condition. Treatment is entirely palliative.

WILLIAMSON, New Orleans.

[AM. J. DIS. CHILD.]

PERIARTERITIS NODOSA OF KUSSMAUL AND MAIER. [illegible] GALAN and M. PEREZ-STABLE, Bol. Soc. cubana [illegible] pediat. **15**:635 (Oct.) 1943.

This is an extensive and careful review of the whole subject of periarteritis nodosa. The authors state that they are describing in another bulletin the first case of this disease in a child to be reported from Cuba. They review the literature in detail, point out the different etiologic theories and in many instances give tabular summaries of the work reported by other authors since Kussmaul and Maier's original contribution, in 1866. They discuss the pathologic anatomy, the clinical signs and symptoms, the prognosis, the diagnosis and what little treatment has been recommended. They bring the subject up to date, in 1943, and make this an excellent reference article for any one interested in the details of the subject.

KEITH, Rochester, Minn.

[AM. J. DIS. CHILD.]

Society Transactions

ATLANTIC DERMATOLOGIC CONFERENCE

JOSEPH KENNEDY, M.D., *Chairman*

HAYDEN KIRBY-SMITH, M.D., *Secretary*

Feb. 26, 1944

Erythema Perstans. Presented by LIEUT. COMDR. E. E. BARKSDALE (MC), U.S.N.R.

Miss B. F. E., white, aged 20, complained of itching, burning red spots. Six years ago, while she was taking high school freshman examinations, red, itching, burning lesions appeared, one on her right hand, one on her right thigh and one on her right buttock. At the same time she had similar sensations on her left eyelid but noted no discoloration of the skin. The lesions lasted about one week and then faded, leaving dark brown scaly macules where the erythema had been.

Since that time the patient has had ten to twelve such attacks. At first they were spaced about a year and a half apart and appeared only at times of mental stress (she had an attack when her father died); she has had two attacks in the last six weeks and does not consider that she has been under any nervous strain in this time.

The longest attack lasted about eight days, while the shortest was four days. Between attacks the affected areas maintain the same coffee-colored, scaly appearance. The left eyelid has never shown any discoloration, but the conjunctiva becomes mildly injected during the period of symptoms.

The menstrual history is regular, with a twenty-six day interval and a five day duration with moderate cramping. There is no noticeable relation between her cutaneous symptoms and her menstruation.

DISCUSSION

DR. D. M. SIDLICK, Philadelphia: According to the patient's statement, the flat, circumscribed, purplish colored lesion on the dorsum of the hand is not the only lesion she has had. There have been other lesions on other parts of the body. Also, according to her statement, the lesions are of a more or less evanescent character. Some have disappeared completely. In others, like the lesion on the dorsum of the hand, the inflammatory reactions have become less intense at times and have then been followed by an acute exacerbation. To a query regarding constipation she answered "No," but on occasion she does take a laxative of the nature of Ex-Lax. I believe that this is a dermatitis medicamentosa caused by phenolphthalein.

DR. EUGENE F. TRAUB, New York: The patient presented several localized areas of erythema, with some scaling and pigmentation. The lesions were scattered—one on the hand, another on the thigh and, I believe, on on the eyelids—and they always remained at these definite sites. The story is that at various times the eruption flares up and then subsides. This is certainly the history of a fixed erythema, and I believe this patient has a drug eruption, though it may not necessarily be phenolphthalein that is responsible. Frequently, fixed drug eruptions are caused by chemicals other than phenolphthalein, and even occasionally a fixed drug eruption may flare up from one of several different offenders.

DR. SAMUEL M. PECK, Bethesda, Md.: Dr. Chargin has pointed out a number of facts in his paper on fixed drug eruptions due to arsenic which are of interest. I had the privilege of examining the histologic sections of his cases. The clinical appearance of the lesions could not be differentiated from that of a fixed eruption due to phenolphthalein. Histologically, they were seen to consist of two primary changes. The changes in the epidermis consisted of hyperpigmentation, and the changes in the cutis consisted of vascular dilatation, plus chromatophoric pigment as well as free pigment in the cutis, especially around the blood vessels. These histologic changes account for the color of a fixed eruption, namely, subepidermic pigment plus the dilated vessels being responsible for the bluish brown appearance. The persistence of the discoloration is due to the pigment in the cutis and not to blood pigments, as is commonly supposed.

DR. FRED WEIDMAN, Philadelphia: It does not suffice simply to secure the history regarding phenolphthalein taken as a purgative. The drug may also be ingested in icings of cakes and candies which have been made pink by phenolphthalein.

LIEUT. COMDR. E. E. BARKSDALE (MC), U.S.N.R.: This is thought to be a fixed drug eruption. We have not definitely been able to diagnose it from the history of the patient. However, she admits that she has taken Ex-Lax tablets.

NOTE.—Since this case was presented, she was given ½ grain (0.03 Gm.) of phenolphthalein by mouth, which produced a definite exacerbation of the eruption in a few hours.

A Case for Diagnosis (Kaposi's Sarcoma; Lichen Planus Hypertrophicus?). Presented by MAJOR Z. N. KORTH, M.C., A.U.S.

D. N., a 28 year old white woman of German-English extraction was seen on Feb. 25, 1944 in the outpatient department of the Walter Reed General Hospital. The history is as follows: In August 1941 swelling, stiffness and pain in the joints of the hands developed. Involvement in other joints, including the shoulders and knees, followed. Periapical infection was found in 1943, which led to the extraction of all lower teeth and clearing of all articular symptoms.

In January 1942 there developed a "lump beneath the skin" about the size of a "marble." It was situated on the right calf and was painful and tender. Within a month the area had become bluish and was of the diameter of an orange, although the area remained rather flat. At about this time the area broke down, draining a yellowish watery material. Wet packs and rest for about one month brought about healing, leaving only a thickened, bluish and rather firm area. Some time later, just after one of the patient's visits to the hospital for biopsy, lesions developed on the elbows in the same fashion as was previously related. These lesions increased to their present size and have remained almost stationary for several months. They are, however, tender, and

slight trauma to them causes considerable swelling and tenderness. About April 1943, swelling in the lower extremities became noticeable, and shortly after this, painful bluish nodules began to form on the distal portion of the legs. Since then there have been gradual extension and increase in the size of the lesions until at present the distal half of the leg is almost completely involved.

No laboratory investigation has been made, since the patient was first seen only twenty-four hours ago. Four biopsies have been done in the past, but in no instance has the patient been told anything of the results.

Examination revealed numerous nodules varying from 0.5 cm. in diameter to large plaquelike areas involving the distal half of both lower extremities.

Kaposi's sarcoma? Lichen planus hypertrophicus? (Army Medical School negative 3655-1)

On the upper half of the legs there are several nodules in different stages of development. One, a comparatively recent lesion, is apparently situated deep in the cutis, is firm and tender to palpation and has an erythematous area above it. Other lesions are deeply violaceous, scaly and indurated and slightly tender. Many show mild to severe degrees of atrophy. The large plaquelike lesions on the distal portion of the legs show numerous changes, including atrophy, small ulcerations, pinpoint hemorrhages, lichenification and scaling. There are papular areas which on close examination are deeply violaceous, some superficially and some deeply situated, which appear to be dilated vessels and petechiae. To the outer side of the midline on either leg in the middle third there is a boardlike area of induration entirely separate from any of the lesions previously described and above which the skin appears to be normal.

Past History.—The patient had kidney trouble when 7 years old and the usual childhood diseases.

Biopsy (Report submitted by Dr. Fred Weidman subsequent to the meeting).—Obviously, the tissue reaction is of the most acute leukocytic type and is accompanied with profound degeneration and inflammation of the blood vessels. This suggests the presence of a hematogenous disease of the order of that which occurs in erythema elevatum diutinum or, less likely, periarteritis nodosa. In relation to the clinical appearances, the absence of pigmentation is noteworthy and indicates, no doubt, the selection of an early lesion for biopsy. It seems inconceivable that such a degree of leukocytic infiltration as is seen here and as much infiltration as was seen clinically could be exhibited in purpura annularis telangiectodes. Certainly the microscopic picture is not that of Kaposi's sarcoma. All things considered, clinically and histologically the disease should be regarded for the time being as of unestablished diagnosis pending additional biopsy of the major lesion. It is conceivable that bromides or iodides could produce such a reaction, but the histologic picture is not diagnostic of such.

Pathologic Diagnosis.—The diagnosis was acute, diffuse, presuppurative dermatitis (like erythema elevatum diutinum).

DISCUSSION

Dr. Jacob H. Swartz, Boston: I should like to add the diagnosis of lupus vulgaris. The color is suggestive of it.

Dr. Fred Weidman, Philadelphia: Kaposi's sarcoma appears to be the most likely diagnosis to me. The lesion is woody, hard and deep brown, and an occasional small superficial hemorrhagic bleb appears here and there. Moreover, several "satellite" lesions well above the major one are almost purely hemorrhagic. I grant that the lesion is much more sharply circumscribed than is usual for Kaposi's sarcoma.

Dr. Maurice J. Strauss, New Haven, Conn.: I do not have a diagnosis to offer, but none of the diagnoses which have been suggested explain the sclerodermalike induration of the subcutaneous tissues and muscles in the region involved. These indurations may or may not be connected with the lesions, but I think that they should be taken into consideration.

Dr. Eugene F. Traub, New York: It seems to me that Kaposi's sarcoma could be excluded as a diagnostic possibility in this case on clinical grounds alone. In the first place, the sex and nationality do not favor the diagnosis, and unless these lesions have been desiccated or treated with some strong chemicals, causing this peculiar scarring and healing, Kaposi's sarcoma would not look like this, according to my experience. Overlying what seems to be pigmented hypertrophic scar tissue are what appear to be hemorrhagic vessels. While vessels or blisters can occur in Kaposi's sarcoma, such occurrence is very rare. Frequently there is a peculiar verrucous formation on the toes, such as is often seen in cases of elephantiasis, which is entirely lacking in this patient and which is generally present in Kaposi's sarcoma. Despite the history, I should still further consider the possibility that this is an eruption due to either an iodide or a bromide. This could account for all the changes seen in the patient.

Dr. Leon Ginsburg, Baltimore: I suggest the possibility of sclerodermatous sarcoid.

Lichen Planus Atrophicus. Presented by DR. FRANK J. EICHENLAUB, Washington.

Mrs. S. A. C., a white woman 48 years old, reports that an eruption first appeared about one year ago on the sides, front and back of the neck and has developed gradually since then. The only medical factor of importance in the case is that she has had hyperthyroidism, which was treated with roentgen ray therapy two years ago.

On the front, sides and back of the neck there are shiny, white, scaly, angulated and in places umbilicated papules, some discrete and some confluent.

The eruption on the back of the neck has improved with roentgen ray therapy and with injections of a bismuth compound.

DISCUSSION

DR. FRANCIS A. ELLIS, Baltimore: Five years ago at the Atlantic Dermatologic Conference in Baltimore, several patients were shown with this disease, and Dr. H. Montgomery (ARCH. DERM. & SYPH. **42**:755, [Nov.] 1940) corrected the diagnosis and differentiated lichen sclerosus et atrophicus from atrophic lichen planus. The clinical and pathologic picture is pathognomonic and is similar to that of kraurosis vulvae.

DR. BERNARD APPEL, Lynn, Mass.: I have always been interested in the controversy over the nomenclature of this disease—whether it is lichen planus atrophicus et sclerosus or lichen sclerosus atrophicus and whether the "planus" is left in or not. Several years ago my view was more or less clarified because I had the opportunity to study a patient who showed a classic picture of lichen planus with the purple, flat, polygonal, pruritic papules typical of a textbook description. In close association, also, were numerous larger, oval, sharply outlined, white, waxy, atrophic areas, such as this patient has shown today. The controversy on nomenclature will undoubtedly continue, but in my opinion this patient today shows evidence of lichen planus as well as of lichen sclerosus et atrophicus.

DR. REUBEN GOODMAN, Washington, D. C.: Lichen planus or not, the end result is the same. The histologic structure shows practically little difference.

CAPT. RICHARD L. SUTTON JR., M.C., A. U. S.: I like the name, "white spot disease," that Wise and Rosen used (*J. Cutan. Dis.* **35**:66, 1917). It does not have the prognosis, I believe, that lichen planus does; one would not expect a patient with such a disease to have violaceous papules on the wrists or the lumbosacral region.

DR. FRANK J. EICHENLAUB, Washington, D. C.: When I presented this patient, I had hoped to present 2 other patients with similar eruptions. This patient was presented with a diagnosis of lichen planus atrophicus. The other 2 patients had what clinically was lichen sclerosus et atrophicus, 1 being the patient whose case was published by Montgomery under that diagnosis. All 3 of these patients improved from roentgen ray therapy and injections of a bismuth compound. One must conclude, therefore, either that lichen sclerosus is in fact a variation of lichen planus or that it does respond to the same type of treatment, a conclusion which is contrary to that of Montgomery's reports.

DR. BERNARD APPEL, Lynn, Mass.: Apropos of the statement of a previous speaker of a preference for the name of "white spot disease," it seems to me that use of that name would be a step backward and not a progressive one. One of the most important contributions dermatologists could make would be to agree on the nomenclature. I am sure that in the "Standard Nomenclature of Disease" there is no disease called "white spot disease." Furthermore, such an indefinite term could well be applied to many dermatologic entities and, I believe, would only be confusing. If dermatologists try to follow the standard classification in the "Standard Nomenclature of Disease" they will be taking a definite step toward crystallizing thought about the clinical pictures involved.

Peculiar Alopecia Symptomatica. Presented by DR. FRANK J. EICHENLAUB, Washington.

Miss N. L. B., a white woman 19 years old, reports that six years ago she had a severe attack of influenza with a high fever. After this, most of her hair fell out. When it grew in again, it grew normally on the sides and back but not on the top and front, where it never grew to more than an inch or so in length. She was treated by a dermatologist, with no beneficial results at that time. Her basal metabolic rate was said to have been normal.

I first saw the patient on Oct. 27, 1943. Then, as now, her hair was normal and healthy at the back and sides of the scalp but short on the top and front, in the usual "bald area" of men.

Microscopic examination of both the short and the long hairs showed nothing abnormal. Her basal metabolic rate on Nov. 20, 1943 was —26 per cent on the first test and —22 per cent on the second.

The alopecia has not materially improved with local treatment and thyroid extract by mouth.

DISCUSSION

DR. ELMER R. GROSS, Wilmington, Del.: I wish to suggest a diagnosis of trichotillomania. This patient has absence of the pharyngeal reflex and of the corneal reflex, which places her disease in a category of psychosomatic dermatology, namely, that of a compulsion neurosis.

DR. MAURICE J. COSTELLO, New York: The half-dollar-sized area of partial baldness with broken off but healthy looking hairs is due, I believe, to mechanical injury to the hair and the scalp, caused by the friction of vigorous rubbing with ointments and a hair brush by the patient and her mother in an effort to stimulate growth of hair.

Necrobiosis Lipoidica Diabeticorum. Presented by DR. RUSSELL J. FIELDS, Washington, D. C.

Mrs. R. M. C., a white woman, presents a lesion on the anterior surface of each foot of about two years' duration, with the lesion on the left foot appearing first. She has had diabetes for five years. When the lesions were originally discovered, her weight was 150 pounds [68 Kg.], and it came down to 96 pounds [43.5 Kg.]. The lesions itch moderately, and there is also some burning and aching.

She presents a yellowish red lesion the size of a half-dollar on the anterior aspect of the left foot. It is subject to changes of color.

DISCUSSION

DR. FRED WEIDMAN, Philadelphia: While I agree with the diagnosis of necrobiosis, there are, nevertheless, some hard, gritty nodules a short distance below the lesion: these made me think of an alternative

diagnosis of calcinosis cutis. A biopsy of the nodules is well worth while.

Paraffinoma. Presented by Dr. H. F. Anderson and Dr. Caroline Burpeau, Washington, D. C.

Mrs. J. H. R., a white woman aged 34, first noticed a mass in her left arm on July 31, 1942, which has been gradually growing since then. The lesion appeared while she was having a course of injections of estrone in oil.

She presents a hard, indurated, slightly tender red mass, irregular in outline. Biopsy of a specimen taken on Sept. 16, 1942 revealed a typical Swiss cheese appearance deep in the cutis. The usual cellular elements were lacking, and there was no foreign body giant cell reaction.

In January 1943, even though no further injections had been given, a new nodule appeared. The lesion from which the specimen for biopsy was taken has never completely healed, and from it bits of a substance resembling paraffin are removed from time to time. I am presenting the patient in order to receive advice as to further therapy.

DISCUSSION

Dr. Francis A. Ellis, Baltimore: I suggest the diagnosis of sesame oil tumor. A report of a patient with a tumor due to this agent was presented by Dr. Conrad (*J. A. M. A.* **121**:237 [Jan. 23] 1943) at the Ninety-Second Annual Meeting of the American Medical Association, at Atlantic City, N. J., in 1942. Histologically, sesame oil tumors have less of the "Swiss cheese" appearance than this tumor has. The fat globules are more uniform, and there is less foreign body reaction. The only satisfactory treatment is excision of the tumor.

Dr. Maurice J. Costello, New York: I had under my observation a patient in whom a systemic reaction developed after each injection of estrone in oil (2,000 U. S. P. units.) The manufacturers suggested that the reaction might be caused by the vehicle, oil of anise, and not by the estrone itself. An intradermal test with 0.05 cc. of the oil caused an erythematous reaction. When this subsided, a pea-sized nodule (paraffinoma) remained for months. I agree with the diagnosis offered by Dr. Anderson.

Dr. Eugene F. Traub, New York: Formerly persons were given injections of various types of oil, not only for medicinal purposes but for cosmetic purposes. The sites where injections were given for cosmetic purposes on the face often became lumpy in a relatively short time, but frequently tumors did not develop for as long as ten to fifteen years afterward. I believe that the only type of treatment which is satisfactory in such cases is complete excision of the tumor mass.

Dr. Fred Weidman, Philadelphia: In my experience with experimental paraffin tumors in monkeys, metastasis to regional lymph nodes took place; accordingly, I favor the excision of this patient's lesion.

Dr. Lloyd W. Ketron, Baltimore: I cannot quite understand the histologic structure of this lesion. There is a broad area of necrosis in the deeper portion of the section with practically no foreign body reaction.

Dr. Harry F. Anderson, Washington, D. C.: I thought that this patient was interesting enough to be presented because some of the nodules developed two or three months after the oil had been injected into her arm. Paraffinoma and sesame oil tumors are identical entities from the histologic standpoint.

Acute Disseminated Lupus Erythematosus. Presented by Dr. Hayden Kirby-Smith, Washington, D. C.

T. C., a white girl, in the spring of 1940 began to have an acute eruption involving the face, the hands and the feet. She was seen by a dermatologist and given four injections of a gold preparation, after which her eruption became worse. She was hospitalized for six weeks, during which time she received four blood transfusions of ½ pint (237 cc.) each and neotinamide. She improved and continued to take neotinamide for three months. She had complete remission of the eruption until the spring of 1941, when she had a slight recurrence, with lesions in the mouth. She was given 1.5 cc. of liver intramuscularly twice a week; compresses of a solution of aluminum acetate were applied to the hands and the feet, and the lesions in the mouth were treated with silver nitrate. These treatments were continued until the early summer of 1942.

The attack had completely subsided and the patient was apparently well until January 1943, at which time she had a recurrence, preceded by rheumatic pains. She was seen by another dermatologist and was hospitalized for three weeks, during which time she was given four blood transfusions of 1 pint (473 cc.) each and nicotinic acid daily. There was no improvement, and the patient returned home in a critical condition. During the various attacks the temperature varied from 99 to 104 F.

The patient was first seen by me in July 1943, presenting brownish pigmentation, dryness and crusting of the entire face and scalp and complete alopecia of the scalp. She also had edematous, oozing, erythematous patches involving the terminal phalanges of the hands and feet. She appeared to be acutely ill, with a temperature of 104.8 F.

Treatment consisted of daily injections of 1 cc. of liver extract intramuscularly, a preparation of vitamin B complex, a proprietary preparation of fresh liver, iron and copper daily and transfusions of 500 cc. of citrated blood given every other week. She gave a history of being sensitive to sulfanilamide and to sulfathiazole. She was given 2 tablets (1 Gm.) of sulfadiazine every four hours. In forty-eight hours her temperature rose to 106 F. Use of sulfadiazine was stopped, and from then on the patient slowly improved; the temperature gradually receded to normal, and by the end of October the patient was able to get out of bed. During her illness her weight dropped from 105 pounds (47.6 Kg.) to 73 pounds (33.1 Kg.). The Wassermann and Kahn reaction of her blood were negative. During the acute illness, the white cell count went down to 4,000 and the red cell count to 2,400,000.

DISCUSSION

Comdr. L. K. MacClatchie (MC), U. S. N. R.: I saw this patient in her first attack. First she had a discoid type of eruption. Three or four injections of a gold preparation were given, the dose gradually being increased to a maximum of 15 mg. After an initial improvement, symptoms of intolerance developed and the use of the gold preparation was discontinued. Shortly after this a subacute disseminated type of eruption appeared on the palms and soles, in the mouth, under the nails and on the trunk and extremities. Also the patient lost her hair. There was a suspicion of lesions of the bladder, as cystitis developed which her general physician was unable to explain. Treatment of the cystitis with sulfonamide compounds given orally was tried, and it was hoped that there might be some

fect on the lupus, as there were infected tonsil tags. The patient, however, was intolerant to sulfonamide compounds as well as to any other drugs tried. It was finally necessary to hospitalize her, and she was given blood transfusions, vitamins by mouth and injections of nicotinamide. After discharge from the hospital, she was given injections of liver. On this regimen the patient had a complete remission of symptoms, and she went back to work. It is interesting to note that she has had three severe attacks, the last one apparently being an acute disseminated lupus erythematosus.

Dr. Jacob H. Swartz, Boston: I want to stress the importance, from my own experience, of the focus of infection in cases of acute disseminated lupus erythematosus which begin with a discoid type of eruption. I recall a girl recently who had two attacks. In 1 instance an abscessed tooth was found. After it was removed, she first became worse and then recovered completely. Six months later she had another similar attack, coincidental with a peritonsillar abscess. A second recovery, with clearance of the focus, followed. Of course, that is only 1 instance. I think that the focus of infection is something to consider seriously, especially in cases in which the disease starts with a discoid type of eruption that later becomes disseminated. One must also differentiate this type of the disease from that of the acute disseminated lupus erythematosus, which begins as such. The prognosis of the latter is much more unfavorable.

Dr. Bernard Appel, Lynn, Mass.: I should like to make a few remarks about the use of gold preparations. I am still in that apparently fast-disappearing group who continue to use gold for the discoid type of lupus erythematosus. I should like to make a statement and an inquiry. It seems to me that the form of gold which was first introduced by Dr. Obermayer a number of years ago, gold sodium succinimide, is a useful salt of gold. I have had some interesting experience with its use for 2 patients who were extremely sensitive to gold sodium thiosulfate. One was so sensitive that after she had been given 5 mg. she displayed a rather severe reaction. I was able subsequently to give these 2 patients as high as 200 mg. of gold sodium succinimide, with no untoward effect. I have continued the use of that particular drug in a number of cases with, I believe, fairly good clinical result. I have not had opportunity to buy any recently, and I do not know whether or not it is still available. The query I should like to make is: Has any one else used that particular drug, and what is his experience with it?

Dr. Maurice J. Strauss, New Haven, Conn.: Several years ago I had 2 patients with lupus erythematosus in whom severe reactions developed when they were treated with gold sodium thiosulfate. Perhaps Dr. Appel will recall that at that time he suggested to me that I try gold sodium succinimide in treating these patients. He even gave me the name of the chemist who could supply the material. I used this for both patients, and both patients had as severe reactions as they did when gold sodium thiosulfate was used. I still have 2 Gm. of gold sodium succinimide in my possession, which I shall be very happy to give to Dr. Appel.

Dr. Samuel M. Peck, Bethesda, Md.: I think that one should be cautious in the terminology one uses in cases of lupus erythematosus, because of the prognosis attached to the type of lupus erythematosus designated. Acute lupus erythematosus has a bad prognosis and almost invariably leads to death. The disease which is designated as chronic discoid lupus erythematosus, even when it is generalized or a superimposed acute lupus erythematosis develops, has a better prognosis. The papers of Klemperer and Baehr have shown that in cases of acute lupus erythematosus one is dealing with a generalized vascular disease, and histologically there are vascular changes which are characteristic of it. Such changes are demonstrable in lesions of the kidney post mortem but are occasionally observed in the cutaneous lesions. I have also been able to point out that the snake venom test always elicits a positive reaction in the patient with true acute lupus erythematosis even when the disease is in the early stage, with lesions first appearing on the face and before they have become widely disseminated; but in the discoid type there never is a positive reaction. In patients with a negative reaction the disease, even when it resembles the acute type, has a better prognosis than in those with a positive reaction. I have had favorable results with Germanin in cases of the chronic discoid type. The dose was usually 20 to 30 mg. given once a week. With such doses renal complications were avoided.

Dr. Maurice J. Costello, New York: Soon after Dr. Peck and his associates treated patients who had the fixed type of lupus erythematosus with injections of Germanin given intramuscularly, we hospitalized 4 patients with the discoid type of this dermatosis, which had been resistant to the conventional therapy. One patient who had had an extensive discoid type of the disease was completely cured and had no complications from the drug. Although the others were greatly improved, the administration of Germanin had to be discontinued because of severe toxic reactions, including renal damage and toxic dermatitis. I have used naphuride sodium (the preparation manufactured in the United States under the trade name of Naphuride Winthrop) in treatment of the fixed type of lupus erythematosus without success.

Dr. Harry F. Anderson, Washington, D. C.: The patient at the present time, in all likelihood, is in a period of remission. I was caring for her about six months ago, at which time there were casts in her urine and articular pains. Her cutaneous manifestations were severe, and she looked as though she were about at the end of the road. There was no favorable reaction to blood transfusions and the administration of liver extract, after many other methods of procedure had failed. I am glad to see her looking so well today and wish to compliment Dr. Kirby-Smith.

Epithelioma, Probably Arising From Sweat Glands. Presented by Dr. H. F. Anderson, Washington, D. C.

E. S., a white woman aged 74, received a bump on the head while in an automobile. Soon after that she noticed a swelling developing on the top of her head. The tumor remained for about three years, with gradual increase, before she consulted me, on Jan. 4, 1944.

The tumor mass consisted of grouped nodules, rounded, hard, waxy and nonulcerating. The whole group covered an area of about 4.5 cm. in diameter. At the time of examination this group of nodules were the only ones noticed. Later three discrete lesions were found in the scalp, some distance away from the original group.

Biopsy showed definite epithelioma, very cellular. The cells in some areas assume formations resembling glandular arrangement.

The treatment to date has consisted of the administration of a total of 2,500 r of roentgen radiation through a 1 mm. aluminum filter plus wide electrocoagulation to all areas.

DISCUSSION

DR. HARRY F. ANDERSON, Washington, D. C.: This patient has been presenting new lesions at a rapid rate. In the last three weeks three distinct nodules as large as 1 cm. in diameter have developed. The diagnosis is undoubtedly the turban type of epithelioma.

A Case for Diagnosis (Rosacea-Like Tuberculid of Lewandowsky; Rosacea?). Presented by MAJOR MURRY M. ROBINSON, M.C., A.U.S.

L. E. is a woman aged 51 years. Her family history shows that one brother was cured of pulmonary tuberculosis.

The lesions first appeared in 1938. Since then they have been present at all times. There has been no remission, although there has been some variation in the number and severity of the lesions.

There are discrete lesions on the face, forehead and temples. They are erythematous with a slight brownish hue, varying in size from that of a pinhead to that of a split pea. They are papular and papulopustular in character. The surrounding skin is hyperemic. On diascopic examination the lesions have a yellowish brown color. Their centers are somewhat soft. A toothpick can be inserted with ease and is retained in position.

The result of a tuberculin test was negative after seventy-two hours. A roentgenogram of the chest showed no evidence of tuberculosis.

Microscopically the section studied showed a small nodule, over which there was some thinning of the stratified layer. Below this there was some eosinophilic degeneration of the collagen. The nodule itself was inflammatory, with considerable round cell infiltration. There was considerable proliferation of endothelial cells and formation of giant cells.

DR. SAMUEL M. PECK, Bethesda, Md.: The physician's clinical description and the histology seem characteristic of tuberculosis miliaris faciei. In favor of such a diagnosis is the fact that the lesions tend to clear up spontaneously. The reaction to the tuberculin test is negative in about 50 per cent of patients with tuberculosis miliaris with concentrations of tuberculin as high as 1:100. The tuberculin patch test is not as reliable as the intradermal test, since it does not give a qualitative result, which is important in this instance.

DR. MAURICE J. STRAUSS, New Haven, Conn.: I believe that a definite diagnosis of rosacea-like tuberculid should not be made in this case. It is my recollection that in such cases there usually is an increased sensitivity to tuberculin. Apparently the opposite is true in this case.

A Case for Diagnosis (Squamous Cell Epithelioma?). Presented by DR. LAWRENCE MCCALEB, Washington, D. C.

A. D. L., a woman aged 22, has a lesion which started one and a half years ago and has been spreading. It is located in the inner canthus of the right eye. The right side of the bridge of the nose is indented. The lesion is pea-sized and has crusted borders with pearly edges.

DISCUSSION

DR. EUGENE F. TRAUB, New York: The duration of the lesion, in my opinion, practically excludes the possibility of its being a squamous cell carcinoma. Coupling this with the clinical appearance, I believe that a diagnosis of basal cell epithelioma is inevitable. A slow-growing, rather firm, nodular lesion in this location that has given rise to practically no subjective symptoms is almost invariably a basal cell lesion. I should expect a squamous cell lesion to reach the size of the present growth within a few weeks, and it would have characteristics that would be entirely different from those of the present lesion.

DR. FRED WEIDMAN, Philadelphia: I should like to submit the diagnosis of healed dacryocystitis. Although the lesion is more conspicuous on one side, the eruption is bilateral. The deep, narrow depression suggests a previously existing sinus rather than the healed ulceration of a cancer. The patient's statement that time and again tears course down over her cheeks suggests an obstruction of the lachrymal duct. A nonpathogenic thread organism, Actinomyces foersteri, sometimes produces large colonies in the duct, becomes calcified and results in the formation of a calculus. This obstructs the duct and, as the result of a secondary infection, there is a communication with the cutaneous surface by the formation of a sinus.

Mycosis Fungoides; Tumor Stage. Presented by DR. HAYDEN KIRBY-SMITH, Washington, D. C.

J. L. B., a white woman aged 33, has had a generalized eruption of thirteen years' duration. She was first seen at Georgetown University Hospital, complaining of severe itching. She presented at that time well defined excoriated lichenified patches. Her disease was diagnosed as a chronic eczematoid dermatitis, and she improved greatly with fractional doses of roentgen rays.

She was first seen by me in 1941, presenting well defined, grouped, erythematous, infiltrated, thickened, excoriated patches, especially about the face, extremities, chest and back. A specimen was taken for microscopic examination. This patient has been treated by means of antipruritic lotions, solution of potassium arsenite and subfractional doses of roentgen rays in order to control the itching. During the past year numerous nodules and tumors have developed which have regressed rapidly with roentgen ray therapy.

The Wassermann and the Kahn reactions were negative. Hematologic examination showed: white cells, 6,200; red cells, 4,500,000; polymorphonuclear leukocytes, 76 per cent; lymphocytes, 16 per cent; eosinophils, 6 per cent, and band forms, 2 per cent.

Scleroderma. Presented by LIEUT. COMDR. E. E. BARKSDALE (MC), U.S.N.R.

A. D. E., a white youth aged 18, complains of areas of pain and anesthesia of three months' duration. He was in Cuba for eight months prior to transfer here. He was well until about the middle of September 1943, when he began having "sharp, stabbing pains" in the region of the left instep. A few days later he began to have similar pains in the right foot and after about a month he had similar pains in his hands. He cannot describe the pains as being in any certain area in his hands, nor can he say whether they were superficial or deep.

About the time that the symptoms appeared in the hands, the pains disappeared from his feet, being replaced by a numbness of the skin and a "drawing" sensation, the toes being involuntarily flexed. Within a short time the symptoms in his hands showed similar change. Paresthesias of a stocking and glove type became so great that he would burn his fingers with cigarets. He noticed that he could not completely extend

s fingers and that his hands were so weak that he was ntinually dropping objects. Atrophy of the interosseus uscles was apparent at this time. Coincidentally with e paresthesia, he noted that the skin over the involved rts was dry and somewhat wrinkled and showed fine aling. Since the onset, the left hand and the right foot ve shown more involvement than the opposite mem-rs, but all affected parts have grown gradually worse. e has lost 25 pounds (11.3 Kg.) since the onset of his mptoms. His present weight is 110 pounds (50 Kg.).

Physical examination showed that both hands are held a position of partial flexion; the left hand is flexed re than the right, though the right is capable of reater voluntary flexion. Neither hand can be fully xtended. The interosseus muscles of the left hand em to be paralyzed and partially atrophic, while those f the right hand are partially paralyzed and not yet rophic. The interosseus muscles of the feet show milar changes.

The skin in stocking and glove arrangement over all xtremities shows dryness, smoothness to palpation and inute scaling. There is complete absence of the senses f touch, temperature and position in the left hand. The right hand and both feet show these sensations to e diminished though not completely absent.

Roentgenologic examination of both hands revealed o evidence of osseous changes. The basal metabolic ate was +2 per cent. Results of a spinal puncture ere negative. The Kahn reaction was negative; the lood count was normal, and urinalysis showed nothing bnormal. Fluoroscopic examination on Dec. 10, 1943 howed demineralization of tarsal, metatarsal, carpal nd metacarpal bones.

At present the right hand has cleared considerably; here is a suggestion of nerve distribution there now, n that the little finger and the ulnar surface of the ring inger show more involvement than the remainder of he digits. There is an anesthetic area on the right kin about 6 inches (15 cm.) long and 3 inches (7.6 cm.) vide. Also there are several anesthetic spots on the left kin. These areas of anesthesia are not sharply demarcated but rather show regions of comparative numbness between the spots of complete loss of sensation and the normal areas. There is an area of thickening, slight induration and some scaling on the dorsum of the left forearm.

DISCUSSION

LIEUT. COMDR. E. E. BARKSDALE (MC), U.S.N.R.: The question of leprosy in this patient has been brought up. So far no organisms have been found. Biopsy of this boy's skin suggested the possibility of scleroderma.

DR. SAMUEL M. PECK, Bethesda, Md.: I hesitate to make a diagnosis of scleroderma in this case. It seems to me that the skin lacks the typical feel of scleroderma. I believe that these are secondary atrophic changes following a nerve injury.

CAPT. RICHARD L. SUTTON JR., M.C., A.U.S.: I agree with Dr. Peck that this is not a case of scleroderma. I submit the diagnosis of infectious neuronitis.

DR. MURRY M. ROBINSON, Washington, D. C.: The only indication that would make it possible to consider the diagnosis of leprosy is the clawhand. I have seen many patients with this disease, and there is nothing about this patient that suggests leprosy to me. In a clawhand of this degree due to leprosy one would expect to see atrophy of the interosseus muscles. In addition, this patient has been in the tropics recently for eight months. I believe that it is an accepted fact that the incubation of leprosy is much longer.

Parapsoriasis. Presented by DR. FRANK J. EICHENLAUB, Washington, D. C.

The patient is a white man aged 30, with active pulmonary tuberculosis for which he is undergoing treatment at Glenn Dale Sanatorium. He presents an eruption, chiefly on the trunk, of six months' duration. It consists of flat, salmon-colored, scaly macules, from 0.5 to 2 cm. in diameter, which do not itch and which have failed to respond to local treatment.

DISCUSSION

DR. FRANK J. EICHENLAUB, Washington, D. C.: The diagnosis that I made (I did not write the record) was simple macular parapsoriasis.

DR. LOUIS GOLDSTEIN, Philadelphia: I do not agree with the diagnosis as presented, because the patient's dermatitis bears no resemblance to the plaque or the guttate type of parapsoriasis and because his lesions lack the necrosis and scarring which is characteristic of the Habermann variety. Since this patient has advanced active pulmonary tuberculosis, he harbors an infectious focus which is sufficient to cause a cutaneous dissemination of the toxic process as seen in the "id" phenomenon in many an infection. I am therefore inclined to consider his as a nonspecific eruption of tuberculous origin, although from its outward clinical appearance it may not necessarily fit into the localized or hematogenous classification of cutaneous tuberculosis.

Syringocystadenoma. Presented by DR. FRANK J. EICHENLAUB, Washington.

T. G. S., a white man aged 42, has had an eruption since 1923. He states that the lesions developed gradually over about a year's time and have since remained stationary.

He presents on the front of the trunk about two dozen elevated, hard, smooth, brownish yellow nodules from about 5 to 7 mm. in diameter.

Biopsy specimen, presented with the patient, shows the lesions to be made up of benign sweat gland epithelium, looking essentially like normal sweat glands, with a surrounding cellular infiltrate.

DISCUSSION

CAPT. RICHARD L. SUTTON JR., M.C., A.U.S.: This is an exceptional case in its extensiveness and is of interest and value to the meeting. The patient said his lesions do not swell when he sweats, although some lesions of syringocystadenoma do. The patient of Sutton and Dennie (*J. A. M. A.* **58**:333 [Feb. 3] 1912) showed engorgement of his lesions when pilocarpine was given. The disease is not familial in his case, the patient says.

Xanthoma Tuberosum. Presented by DR. JOSEPH V. KENNEDY, Washington, D. C.

P. J., a white man aged 22, states that about one and a half years ago an eruption began on the right elbow. It has spread rather slowly but now involves both elbows and both knees. Recently the eruption has spread to the right palm.

Examination reveals the presence of multiple yellowish nodules on the extensor surfaces of the elbows and knees and, to a slight extent, on the palm of the right hand. These lesions show dilated blood vessels on the surface. There are no subjective symptoms.

A roentgenogram of the chest showed the lungs and heart to be normal, and an electrocardiogram was within normal limits. A urinalysis disclosed nothing signifi-

cant. The basal metabolic rate was —11 per cent. The nonfasting blood sugar level was 140 mg. per hundred cubic centimeters; the fasting level, 120 mg. The cholesterol level was 246 mg. (normal, 140 to 190 mg.) per hundred cubic centimeters and the sedimentation rate 2 mm. per hour. The hemoglobin content was 97 per cent; the red blood cell count, 4,360,000, and the white cell count, 6,000, with 64 per cent polymorphonuclear leukocytes, 28 per cent small lymphocytes, 3 per cent monocytes, 2 per cent eosinophils, 1 per cent basophils and 2 per cent transitional forms.

A Case for Diagnosis (Dyskeratoid Dermatosis?). Presented by MAJOR Z. N. KORTH, M.C., A.U.S.

F. D., a white man aged 24, was admitted to the Walter Reed General Hospital on Feb. 21, 1944. His complaint was itching over the neck, axillas, groins, perineum and buttocks. About April 1, 1943, he noticed "blisters" developing on the right elbow. These cleared rather promptly with the use of a lotion. Later "reddened" areas began to appear in the axillas, on the back of the neck, in the groins and on the buttocks, which after a few days became vesicular and then crusted. There has always been severe pruritus.

Examination revealed discrete and confluent erythematous eczematoid patches. In the groin particularly and on the medial aspect of the left thigh there is a dollar-sized group of vesicles. No lesions are present on the neck, and stroking the area failed to elicit more than a mild erythematous response.

The patient's father as a young man had had some form of eruption on his hands which was finally cleared with an undetermined type of radiation treatments. A brother had had a vesicular eruption on his hands and arms, which, according to the patient, was similar to his own disease but much less severe.

Laboratory determinations included: red cells, 4,400,000; hemoglobin content, 85 per cent; white cells, 8,300, with polymorphonuclear leukocytes, 56 per cent; lymphocytes, 36 per cent; monocytes, 2 per cent; eosinophils, 6 per cent. Other observations were not remarkable, excepting those made on the biopsy specimen. A slide is presented for examination.

DISCUSSION

DR. WALTER F. LEVER, Boston: I favor the diagnosis of dermatitis herpetiformis, because of the sudden onset of the eruption, the intense itching and the distribution of the lesions. The buttocks and the posterior surfaces of the thighs are typical locations for dermatitis herpetiformis. I suggest that the patient be given sulfapyridine, and in a few days it will be clear whether or not the diagnosis of dermatitis herpetiformis is correct.

DR. FRANCIS A. ELLIS, Baltimore: I agree with the diagnosis of dermatitis herpetiformis. Dr. M. H. Goodman claimed that oral lesions can occur in this disease. The lesions in the axilla are more infiltrated and elevated than usual. Some patients with this disease do not respond to sulfapyridine, even though the concentration in the blood is raised to 18 or 20 mg. per hundred cubic centimeters. Other patients may remain free of lesions by the ingestion of 1 Gm. of sulfapyridine a day.

DR. WALTER F. LEVER, Boston: Sulfapyridine has been, in my experience, superior to sulfanilamide. Far smaller doses of sulfapyridine are required for the control of the eruption. Sulfathiazole was found to be of little value; sulfadiazine and sulfaguanidine, of no value.

DR. JACOB H. SWARTZ, Boston: I believe that this work has already been completed and reported. The results were not comparable with those derived from the use of sulfapyridine.

CAPT. RICHARD L. SUTTON JR., M.C., A.U.S.: I had a patient with dermatitis herpetiformis and chemo-resistant gonorrhea; course after course of sulfathiazole and sulfadiazine did not help either his gonorrhea or his dermatitis. He received no sulfapyridine, however, which, as Dr. Costello pointed out—first, I believe—(ARCH. DERMAT. & SYPH. **42**:161 [July] 1940), is the most effective of the sulfonamide compounds in the treatment of this dermatosis. When my patient received 100,000 units of penicillin, his gonorrhea was cured at once in the usual dramatic fashion but his dermatitis herpetiformis showed no response at all, not even temporary.

DR. ADOLPH ROSTENBERG, Washington, D. C.: I should not make a diagnosis of Duhring's disease in this case. I should like to ask a question concerning the use of sulfapyridine in the treatment of this disease. As I recall the report by Swartz and Lever (ARCH. DERMAT. & SYPH. **47**:680 [May] 1943), sulfapyridine was found to be the most effective of the sulfonamide drugs; sulfanilamide was of less value, and sulfathiazole, sulfaguanidine and sulfadiazine were practically of no value. This suggests to me that it may be the pyridine portion of the sulfapyridine molecule which is causing the improvement. It is interesting to note that nicotinic acid is pyridine-3-carboxylic acid. To carry this hypothetic reasoning one step further, if it is the pyridine which is effective, it may be because there is a deficiency of nicotinic acid for which the pyridine is to some degree compensating. I should therefore suggest that nicotinic acid or its amide be tried in the treatment of this disease.

Superficial Benign Basal Cell Epithelioma. Presented by DR. H. F. ANDERSON and DR. CAROLINE BURPEAU, Washington, D. C.

A. P. F., a white man aged 48, has had psoriasis for years. His treatment has included both roentgen ray therapy and the administration of arsenicals. The eruption diminished, and for many years the patient did not bother about having treatment. On Nov. 20, 1943, he presented himself to me, complaining of what he thought were new patches of psoriasis. These patches were scattered over his chest and neck and had been present for at least a year and a half.

On the chest and neck there were sharply defined plaques. Scales were extremely fine and adherent. These patches also presented eczematoid changes, pigmentation and atrophy.

One of the lesions on the neck was removed for biopsy and showed typical superficial benign basal cell epithelioma.

DISCUSSION

DR. FRANCIS A. ELLIS, Baltimore: It is interesting that this patient has psoriasis and that many years ago he took arsenic for several years. Some cases of this type have been reported as cases of psoriasis in which malignant degeneration occurred, whereas the patient actually has multiple superficial epitheliomatosis due to the ingestion of arsenic. Histologically, this type of epitheliomatosis can be differentiated from other forms by the dyskeratosis and vacuolation of the rete cells.

CAPT. RICHARD L. SUTTON JR., M.C., A.U.S.: This type of lesion is spoken of as "multicentric" in origin, because the usual section, perpendicular to the skin,

shows neoplastic epithelium adjacent to the epidermis in numerous islets. Madsen, in 1940, reported the examination of such lesions through the use of tangential sections, which revealed that tumor tissue forms a network applied to the under surface of the epidermis as a circumscribed, continuous, retiform, discoid mass of neoplasia (quoted by me in ARCH. DERMAT. & SYPH. 46:37 [July] 1942, from the abstract in Wise, F., and Sulzberger, M. B.: Year Book of Dermatology and Syphilology, Chicago, The Year Book Publishers, 1941, p. 494). The "multicentricity" then exists only for those who see ordinary sections. If one looks at the lesion from a distance of 6 feet (1.8 meters) it looks like the solitary lesion that it is.

Psoriasis; Contact Dermatitis. Presented by DR. H. H. HAZEN, Washington, D. C.

The patient began tile work in 1923 and had no trouble until October 1942, when a dermatitis developed on the palms and the backs of the fingers. He stopped tile work in December 1942 and took a clerical job. In March 1943 he was finally referred to another dermatologist, who gave him a patch test for cement and found that he reacted positively at the end of six days. The patient continued with treatment prescribed by this dermatologist until November 1943. While under active treatment, he received roentgen ray therapy. From April to November he used sandpaper and dihydroxyanthranol in benzene. A sulfated fatty acid (Acidolate) was substituted for soap for cleansing purposes.

In November 1943 the patient consulted another dermatologist, whose diagnosis was psoriasis. A biopsy was performed on tissue from the web of the thumb, and the pathologist to whom the tissue was sent reported that the disease was psoriasis. However, careful study of this report and personal examination of a slide show that while the lesion may have been one of psoriasis it was more probably a lichenification or represented a chronic dermatitis following continued irritation. It should be noted that no microabscesses were present and that there was an unusual amount of edema in all layers.

With regard to the diagnosis, it should be noted that psoriasis of the palms alone is exceedingly rare; that there was no erythema present; that the edges were not well defined; that there was no pitting of the finger nails; that there had been no spontaneous improvement of the hands since the trouble first appeared, and that with simple, nonirritant treatment there was improvement within ten days after I first saw him, Jan. 24, 1944.

This case exemplifies the difficulty that sometimes arises in making a diagnosis of industrial dermatitis. The difficulty of making a diagnosis from microscopic observations in cases of certain common diseases is illustrated.

DR. SAMUEL M. PECK, Bethesda, Md.: The clinical impression is that this is a case of contact dermatitis, possibly due to alkalis or solvents. In the absence of typical psoriatic lesions, I should hesitate to make a diagnosis of psoriasis of the hands or feet.

DR. JOHN W. MARTIN, Washington, D. C.: I am interested in this case because I was called on to testify before the Employee's Compensation Commissioner of the United States government as to whether this man had contact dermatitis from cement. At that examination there was no resemblance to contact dermatitis; rather, it was characteristic of dermatophytosis, pustular bacterid or psoriasis. Cultures were negative for pathogens. Biopsy showed structures characteristic of psoriasis. Therefore, a diagnosis of psoriasis was made. This diagnosis was based not on clinical and microscopic observations alone but on my former experience of seeing many patients with cement dermatitis while I was consulting surgeon for a large cement plant and, also, on the history that this man's condition showed no great improvement although he had not been working with cement for two years.

A Case for Diagnosis. Presented by MAJOR Z. N. KORTH, M.C., A.U.S.

J. G., a white man aged 38, was admitted to the hospital Oct. 18, 1943, with an ulcerated lesion on the lateral aspect of the distal third of the right leg. His history revealed that while training a dog at the War Dog Reception and Training Center he sustained a rope burn in this area when the dog bolted and tried to get free. The skin was denuded and had a clean red area which oozed clear fluid. The area failed to heal, and he was admitted to a station hospital, where treatment was carried on until he was transferred to Walter Reed General Hospital. There had been no improvement; in fact, the lesion had become slightly worse.

On admission, examination revealed a rectangular lesion about 10 by 5 cm., which was elevated and sharply outlined. Throughout the lesion there were rather minute ulcerations, and the lesion was slightly boggy on palpation. Biopsy performed on Oct. 27, 1943 led to the diagnosis of chronic dermatitis with ulceration, and one performed on November 19, to the diagnosis of chronic ulcer of the skin. Examination on these occasions failed to reveal any etiologic agents. Cultures were all negative except for staphylococci and streptococci. Wet dressings of solution of aluminum acetate were used, and the lesion finally healed. The patient was about to be returned to duty when there was a sudden recurrence, with extension to the surrounding tissue and development of many pea-sized ulcerations. Much edema developed, and the area became vividly erythematous. Aluminum acetate soaks failed to bring about improvement, and 10 per cent potassium iodide solution was used with almost immediate results. Thirty drops of potassium iodide three times a day by mouth brought about salivation and headache and had to be discontinued. At present the potassium iodide soaks are still being used. Roentgen ray therapy was not given at Walter Reed General Hospital, since the patient had had a total of 500 r prior to admission, without any change in the lesion.

Laboratory observations were not significant.

MAJOR Z. N. KORTH, M. C., A. U. S.: Whatever the origin of the disease, the patient is a dog trainer in the Army. He has had fixed dressings for a period of two months—absolutely fixed, so that he could not release them. The problem of malingering has been seriously considered because the eruption has recurred without any particular reason and for the past two months he has had fixed dressings.

CAPT. RICHARD L. SUTTON JR., M. C., A. U. S.: This patient interests me greatly. I see numerous instances of this sort with soldiers, in whom dermatitis begins with chigger bites on maneuvers or a comparable trivial injury and develops into circumscribed spreading patches of a solid eruption, which does not manifest a tendency to heal in the center but slowly spreads by expanding and, apparently, also by autoinoculation. It itches severely, is exudative at first but tends eventually to become dry and lichenified and induces local hyper-

pigmentation. Then it does not change in months, except to become worse under treatment with some medicaments. Sulfonamide ointments applied during the early exudative stage, when the disease resembles ordinary infectious eczematoid dermatitis, induce sensitivity. I have seen patients in whom, months after the start of the disease, the administration of 0.5 Gm. of sulfathiazole by mouth would cause bullous exacerbation of the lesions. Cultures of material in these bullae prove to be sterile.

I have followed 1 such case in particular for several months, using every facility at my command; liquid and unguent antiseptics, benzine, mercury bichloride baths, gentian violet medicinal, triple dye, iodine preparations, merthiolate, an ointment of benzoic and salicylic acid, 30 per cent sulfur ointment, salicylic acid and sulfur ointment and protective dressings. I have also avoided medication for adequate periods, in order to assess the value of doing nothing, which is often good dermatologic therapy. Scrapings from the lesions showed no parasites except hemolytic Staphylococcus aureus, although Trichophyton purpureum was diligently sought. Excised bits smeared over Petri dishes yielded only staphylococci. Yet penicillin in adequate dosage likewise failed to help. Roentgen ray therapy did help, though not in the conservative doses of 75 r to which dermatologists are accustomed, but in doses of 200 r. After about four such doses at seven day intervals, a lesion would disappear permanently. I am confident that adequate roentgen therapy will cure this patient even though approximately 500 r in small doses has been given. I wish that I knew the cause of this lesion, from which we have obtained only Staph. aureus; perhaps it is a lichenifying type of infectious eczematoid dermatitis. Staphylococcus toxoid will help patients with dermatitis infectiosa eczematoides, but it and autogenous vaccines have not helped my patients with "Dermatitis; lichenoid, chronic, disseminated, severe, cause undetermined."

Dr. Murry M. Robinson, Washington, D. C.: During several years of practice in the service, I have seen many similar ulcerative lesions in soldiers. The history is fairly typical. The lesion frequently appears as a result of trauma due to pressure, such as is produced by government issue shoes. The soldier is admitted to the hospital, and after the use of fairly simple procedures, such as application of wet dressings, the lesion heals and the patient is sent back to duty. The trauma is duplicated, and the lesion returns. The patient is then readmitted to the hospital. This time the lesion is slow in healing and frequently fails to respond even to roentgen therapy. In some cases, satisfactory results were obtained from the use of 5 per cent scarlet red in paste of zinc oxide N.F.

Major Z. N. Korth, M. C., A. U. S.: This patient has had dressings since he was transferred to my ward about two weeks ago. Up until that time he was in my ward for only two nights. At the time that I saw him, about the middle of October, the lesion was slightly longer than now and definitely rectangular. The lesion occurred when the hound which the man was training pulled him and scratched the rope against his leg. At that time he failed to improve with the use of all types of therapy. Solution of aluminum acetate was applied, and a dressing was placed over it. The dressing could be identified by some marks placed on it. The patient was urged to return to change the dressing, and the eruption again broke out. He was sent to me about two weeks ago. He was given potassium iodide with a dressing which I am pretty certain he is not getting changed. He has done fairly well under treatment with potassium iodide. He has been given some by mouth, but it had to be discontinued because of the symptoms arising. So far as roentgen rays are concerned, this man had three treatments prior to his admission to Walter Reed General Hospital, and he was referred to the radiologic department for further roentgenologic therapy, but the radiologist refused to go ahead with further treatment.

Dr. Eugene F. Traub, New York: It is well known that the histories taken by different men can bring out entirely different points in the patient's story. I am sure that this fact will be appreciated when I say that on talking to this patient I gained an entirely different impression from that stated on his chart. If his story is reliable, he certainly has had nothing remotely resembling a sealed dressing since around last Thanksgiving or early in December. He stated that the lesion had almost entirely healed, and he was more or less left to his own devices. From about Thanksgiving until the present time he has applied his own medication with no medical supervision. The dressings were not sealed ones and were not applied in such a manner that malingering could be excluded. In fact, he stated that he put on the dressings himself. Therefore, while this may not at all be a matter of malingering, nevertheless I think that the exacerbations might well have been caused by scratching or by a dressing he has applied himself, sticking to the lesions in such a manner that when it is pulled off it causes more irritation than it does good. For this reason I believe that the eruption can largely be explained on an artificial basis.

Dr. Maurice J. Costello, New York: I believe that this patient may have an ulcerative undermining infection of his skin caused by the microaerophilic hemolytic streptococcus. Proper bacteriologic studies for anaerobic organisms should be performed. I suggest that fresh zinc peroxide medicinal in an ointment base be applied and that it be covered with wet gauze and sealed with a petrolatum gauze dressing.

Dr. Fred Weidman, Philadelphia: I do not believe that this is a factitial lesion, because there are some pustules around its edge. It would be hard for the patient to induce these himself. In view of the indolent type of reaction, I am reminded of the characteristics of a microaerophilic streptococcus infection, such as Meleney has written about, for which zinc peroxide medicinal is indicated therapeutically.

Dr. Bernard Appel, Lynn, Mass.: I suggest a real old time dressing which I have used many times successfully, the so-called hourglass bandage. It consists of putting on whatever dressing is appropriate, lightly medicated. Several layers of cellulose tissue paper are placed on top of this, so as to encircle the entire limb at the site. Then ordinary loose mesh cotton bandage is applied in moderate thickness and extent, usually not less than six or eight layers. Then several coats of water glass are painted on in succession; from four to six applications are usually sufficient. This water glass is the household solution of sodium silicate in which eggs are usually preserved. The resultant cast is light and strong and comfortable, tamper proof and easily removed. This bandage could be used if it turns out that the patient has dermatitis factitia and it becomes advisable to use an occlusive dressing.

Capt. Richard L. Sutton Jr., M. C., A. U. S.: I apologize for speaking twice during the discussion of 1 case. I have managed more than a dozen cases like this in Army hospitals. Wet dressings with hydrogen

peroxide or sodium perborate did not help. Plaster casts have not helped. Adequate roentgenologic therapy does help.

MAJOR Z. N. KORTH, M. C., A. U. S.: I wish to corroborate what Captain Sutton says. This man has had zinc peroxide medicinal. He has had sodium perborate. It is possible that I may convince the authorities at the hospital to give him more roentgen therapy. At least, I will do my utmost.

Amyloidosis Cutis. Presented by DR. HERMAN KITTREDGE, Washington, D. C.

C. P. K., a white man aged 74, (mentally defective) is said to have had lead poisoning when young but to have made a good recovery. Considerable portions of both legs are studded with mostly discrete, brownish yellow, hemispherical, interfollicular papules which are 2 to 5 mm. in diameter, dry, hard and glassy. Some are scaly at the summits.

Injections of 1 per cent solution of congo red, administered both intracutaneously and subcutaneously four years ago gave positive results. Subcutaneous injection of 1 cc. of the same dye in the posterolateral aspect of the right calf was given subcutaneously yesterday with the result seen today. After intravenous injection of congo red a week ago as a test for systemic amyloidosis, the serum lost 33.4 per cent of the dye after one hour, which, according to Levinson and McFate, is inconclusive.

Laboratory determinations were within normal ranges. Biopsy has not been performed recently, but sections prepared and studied four years ago by Dr. Ruben Nomland, of the University of Iowa, all showed deposits of amyloid, the stains used being methyl violet, Giemsa, Van Gieson and hematoxylin and eosin. The amyloid stains have, of course, faded in the three accompanying sections, which now show only the general histologic structure.

The patient had four or five fractional doses of unfiltered roentgen rays four years ago, when the itching was severe, but he has had no subsequent treatment. This therapy relieved the itching.

DISCUSSION

CAPT. RICHARD L. SUTTON JR., M. C., A. U. S.: Lichen amyloidosis is an extremely pruritic disease. In addition to the amyloidosis demonstrated by reliable tests, I believe that the patient manifests a lack of vitamin A.

Granuloma Inguinale. Presented by DR. FRANK J. EICHENLAUB, Washington, D. C.

D. K. K., a Negro man 37 years old, first noted in October 1938 a small nodule on the left side of the anterior perineum. It gradually enlarged, and at times small nodules would appear and coalesce with the original growth. In February 1939 the patient went to the Health Department Clinic for treatment. A serologic reaction of 3 plus was obtained, and injections of arsphenamine and a bismuth compound were given until April 1940. During this time a lesion developed in the right perianal region, and all the lesions had remissions and exacerbations. The lesions were oval in outline above the surface of the skin and had the color of red meat.

The patient was admitted to Gallinger Municipal Hospital in May 1940, and intramuscular injections of Fuadin were given for five weeks. All the lesions healed, and the patient was discharged to the clinic. In April 1941 two new lesions developed in the vicinity of the old ones. Since the patient was unable to secure treatment for about a year, the new lesions coalesced with the older ones. On readmission to Gallinger Municipal Hospital in July 1942, all the involved areas again had the appearance of red meat. The patient was given injections of a bismuth compound and Fuadin for eight weeks with no apparent improvement, and he was again discharged to the clinic.

He returned to the hospital again in June 1943, because of a gradual spread of the lesions. He was given 20 per cent podophyllum in olive oil topically and freshly prepared 2 per cent solution of antimony and potassium tartrate, intravenously, twice weekly for eight weeks. Decided improvement was noted, and the patient was again discharged to the clinic for injections of Fuadin. He was again hospitalized in December 1943, as the lesions were larger. He has been receiving podophyllum and Fuadin.

There is a linear lesion 4 by ½ inch (10.2 by 1.3 cm.) on the left anterior side of the perineum, studded with areas of depigmentation and redness. On the right side of the perianal region there is a plaque 3 by 2 inches (7.6 by 5.1 cm.) of red, healing granulation tissue, the lateral border of which is scabbed.

The laboratory determinations were as follows: the Frei and Ducrey tests elicited negative results on two different occasions; the Kahn reaction in 1939 was 3 plus; in 1943 it was negative. The urine was normal. In June 1943 the red blood cell count was 4,160,000; the white blood cell count was 5,500, and the hemoglobin content was 80 per cent. In January 1944 the white blood cell count was 6,550, and the hemoglobin content was 98 per cent.

On biopsy, leishmania bodies were found.

Mycosis Fungoides. Presented by DR. FRANK J. EICHENLAUB, Washington, D. C.

C. M., a Negro man 31 years old, has a lesion which started on March 17, 1942 as two white pea-sized nodules in the upper part of the intergluteal fold. After about two months, the lesion broke down and began to spread until the entire fold was involved, which took about three months. The patient went to Providence Hospital, where the entire area was excised. About this time he noticed a kernel in the right groin. The excised area around the anus healed and broke down again in four months. Then for about a year he went to a private physician, who gave him Fuadin intramuscularly and neoarsphenamine intravenously. There was no response to this treatment. All during this time the right inguinal lymph node gradually enlarged and started to drain.

The patient came to Gallinger Municipal Hospital Jan. 5, 1943, because the lesion around the anus was draining profusely and because a nodule was developing in the right inguinal region. During the hospital stay the nodule broke down completely, and soon the patient noted "red meat" being formed. After one month of hospitalization, the left inguinal node enlarged and broke down and healed in about three months. The patient was in Gallinger Municipal Hospital until August 1943. He was given podophyllum topically and antimony and potassium tartrate (2 per cent freshly prepared solution) intravenously twice a week and a few injections of Fuadin. All granulation tissue had disappeared.

After discharge this man went to Providence for clinical treatment and there received Fuadin. Around Christmas 1943 a nodule again appeared in the right

groin, which soon broke down, and new granulation tissue began forming around the anus.

In the right groin there is a granulating ulcer, 2½ by 1 inch (6.5 by 2.5 cm.), consisting of bright red tissue and a serosanguinopurulent discharge. Around the anal region there is a reddened, granulating ulcer 5 by 3 inches (12.7 by 7.5 cm.) and some smaller ulcers extending down onto the posterior surface of the scrotum.

Laboratory determinations in 1943 included negative reactions to the Frei and the Ducrey tests and a negative Kahn reaction six times from 1941 to 1944. In 1944, the Frei and the Ducrey tests elicited negative reactions on two occasions.

Biopsy showed the presence of leishmania bodies.

DISCUSSION OF THE TWO PRECEDING CASES

DR. D. C. A. BUTTS, Washington, D. C.: What I have to say is merely an expression of ideas which have apparently been borne out by certain observations which I have repeatedly made, not only in the 10 cases tabulated here but also in a series of 8 cases studied in 1937 and in advanced cases which I recently had occasion to see in Trinidad and British Guiana. However, the statistics which I shall present are based entirely on the 10 cases studied here in Washington, 2 of which you had an opportunity to observe this morning.

Seven of the patients showed the presence of leishmania bodies. Six of the 7 patients gave a history of having had a Phthirus pubis (crab louse) infestation from a minimum of one month to a maximum of eight months prior to the onset of their disease. The only exception to this observation was a woman patient. Thus more than 85 per cent of the patients showing leishmania bodies had had crab lice eight months or less before the onset of the gross lesion. The 3 patients in whom leishmania bodies could not be found gave a history that was negative for louse infestation. In 2 of the 7 patients (28.6 per cent) the external genitalia were initially involved, and in the remaining 71.4 per cent the initial changes appeared in the inguinal or perianal regions, which are the ones most frequented by the crab louse.

Of the 7 patients showing the presence of leishmania bodies, 4 (or 57 per cent) also showed during dark field examination the presence of an active spiral and also a motile coccobacillary form of organism. Unfortunately, dark field studies were not possible for all 7 patients. The 3 patients who did not show the presence of leishmania bodies were likewise lacking in the spiral and motile coccobacillary forms. These observations were previously reported by me in 1937 (Butts, D. C. A.: Granuloma Inguinale; Preliminary Report on Certain Microscopic Observations. *Am. J. Syph., Gonor. & Ven. Dis.* **21**:544 [Sept.] 1937). In 1939 Dr. Robinson, in discussing Dr. Greenblatt's paper (Greenblatt, R. B.; Dienst, R. B.; Pund, E. R., and Torpin, R.: Experimental and Clinical Granuloma Inguinale. *J. A. M. A.* **113**:1109 [Sept. 16] 1939), made a statement that the spiral forms reported by me were of the perfringens type and that the motile bacteria were fusiform bacilli. Dr. Robinson went on to say that if the material was obtained from the base of the lesion only leishmania bodies would be found. I might add that if one is to assume that the spiral and bacillary forms are contaminants, then one must also make the same assumption concerning the leishmania bodies, because they are generally found together in the same smears. I regret that I did not clearly state in my preliminary report in 1937 that the material had always been removed from the base of the lesion. Always spiral and motile rod forms were found, whether or not leishmania bodies were observed. The exact nature of the leishmania body is still questionable. It seems possible that it may be a sporozoon, similar in some respects to the coccidium or to the plasmodium, or it is not beyond the stretch of the imagination to theorize that the spiral form and the rod form reported by me and the intracellular organisms (leishmania bodies) are transformations of the same organism. It is my hope soon to conduct some louse transmission experiments and, at the same time, to make intensive bacteriologic studies on the lice removed from infested patients. Also I hope to continue my studies on the nature and significance of the organisms observed in lesions of granuloma inguinale.

DR. REUBEN GOODMAN, Washington, D. C.: The only flaw in the theory is that pediculosis pubis in Negroes is actually unheard of. I have yet to find a case of it myself.

DR. H. H. HAZEN, Washington, D. C.: At Freedmen's Hospital we have had the opportunity to study over 75 patients with granuloma inguinale. All but 3 of them had positive serologic reactions for syphilis, and the vast majority of these results were confirmed in another laboratory. It would seem that granuloma inguinale should be included among the ever growing list of diseases that cause a positive serologic reaction. The second point is the one in which Dr. Goodman has forestalled me. During thirty-five years of work at Freedmen's Hospital, only five times has a case of pediculosis pubis been encountered in either the clinic or the wards, and pediculosis corporis is equally rare, despite the fact that the diseases have been carefully looked for.

DR. D. C. A. BUTTS, Washington, D. C.: One more word about the incidence of Phthirus pubis infestation among Negroes. My figures certainly do not coincide with those of the other two speakers. I do find it difficult to get Negroes to give an honest history. However, if they do, many of them will give a history of louse infestation.

LOS ANGELES DERMATOLOGICAL SOCIETY

WILLIAM H. GOECKERMAN, M.D., *Chairman*

CLEMENT E. COUNTER, M.D., *Secretary*

March 14, 1944

Lupus Erythematosus, Discoid Type. Presented by DR. CLEMENT E. COUNTER.

M. C., a woman aged 46, began to have the present inflammatory eruption of the face about seven years ago. The first lesion appeared on the lower part of the face and was approximately the size of a dime. Since then it has enlarged to its present size and new similar lesions have occurred on the sides of the face just below the ears. About 1918 the patient had syphilis and received approximately six months' therapy, which included injections of mercurials and potassium iodide by mouth as well as six to eight intravenous injections of arsphenamine. The Wassermann reaction became negative and has been negative ever since.

There are defined erythematous patches on the lower part of the face, including chiefly the chin and the upper lip, entirely surrounding the mouth. Other similar lesions are present on the sides of the face just below

ir ears. The lesions are red and papular and have fine clinging scales. In places, there are dilated pores. The central portion of the lesions tends to be brownish and to exhibit considerable atrophy.

Examination of the chest eighteen months ago failed to reveal any evidence of active tuberculosis.

The Wassermann reaction of the blood was negative, and results of an examination of the spinal fluid two years ago were entirely negative.

A biopsy performed in February 1942 of one of the lesions below the left ear revealed perivascular infiltration in the upper part of the corium. There were hyperkeratosis and plugging of the follicles, together with acanthosis in the epidermis, all of which are consistent with lupus erythematosus.

Gold sodium thiosulfate and bismuth subsalicylate have been given in groups of from twelve to sixteen weekly injections. The injections of gold began with 5 mg. and increased so that later injections of a given group have been 50 mg. doses, and the bismuth has been given in 0.13 Gm. doses.

For the past four months she has been using a diet in which sodium chloride has been almost entirely eliminated. In addition, she has taken 9 grains (0.58 Gm.) of quinine sulfate by mouth daily for eight weeks at a time on two occasions.

This case is presented for therapeutic suggestions.

DISCUSSION

DR. H. C. L. LINDSAY: I suggest giving the patient neoarsphenamine. I presented 2 patients with lupus erythematosus both of whom had clearing with neoarsphenamine. Both of these patients had had indifferent results from therapy with bismuth and gold salts which had been given for over a dozen years.

DR. SAMUEL AYRES: The patient said that she had some kind of pelvic trouble a number of years ago, and she complains of some discomfort. I wonder whether a focus of infection might be present in the pelvic area.

DR. CHRIS HALLORAN: Regarding the treatment of lupus erythematosus with neoarsphenamine, many of you may remember a patient at the Los Angeles County Hospital whose disease was recalcitrant to treatment and to whom I gave neoarsphenamine. After the first few injections the eruption became disseminated. The patient later had considerable improvement with injections of liver extract intramuscularly.

DR. W. H. GOECKERMAN: Years ago while I was at Mayo Clinic I treated several dozen patients with neoarsphenamine, and I found it of no use. I discarded it at that time because I had an experience similar to that of Dr. Halloran.

DR. KENDALL FROST: If one will consult Schamberg's original paper on therapy with gold, he can learn something on dosage. I think that sometimes we do not use gold to its fullest therapeutic potentialities. Schamberg, I believe, advocated 100 mg. twice weekly as the maximum dose.

DR. M. E. OBERMAYER: I am glad that Dr. Frost brought up the question of dosage. There has been a tendency for us to be overcautious because of the possibility of serious toxic reactions, particularly from gold sodium thiosulfate. Such reactions can be minimized by preparing the patient for gold therapy by means of a course of injections of liver extract. I prefer the use of a gold compound of low toxicity, such as the ammonium salt of succinimidoauric acid, a compound which was prepared by Kharsh and Isbell, of the Department of Chemistry of the University of Chicago, and studied by S. W. Becker and me (Obermayer, M. E., and Becker, S. W.: Ammonium Succinimido-Aurate, a Gold Compound of Low Toxicity, *J. Invest. Dermat.* **1**:85, 1938). When used for lupus erythematosus, this compound shows a therapeutic effect similar to, but perhaps slower than, that of gold sodium thiosulfate, but untoward reactions are much less frequent and certainly less serious than those from other gold compounds. It has a gold content of 28.4 per cent. Individual doses range from 200 to 400 mg., but even considerably higher doses can be given without toxic manifestations. Because the drug is more rapidly excreted than is sodium thiosulfate, it may be advisable to administer it twice instead of once weekly. Ammonium succinimidoaurate can be obtained on application to Dr. Ben Sher, 912 Margate Terrace, Chicago.

A Case for Diagnosis (Lichen Planus with Atrophic Lesions; Lichen Sclerosus et Atrophicus of Hallopeau?) Presented by DR. HAL E. FREEMAN.

W. C. W., a man aged 58, has an eruption which began about seven years ago and has been persistent ever since. It is asymptomatic.

The present examination reveals more than twenty-five flat, only slightly raised, firm white papules on the flexor surface of the left wrist.

The patient has taken thyroid extract for about three years.

The Kahn test of the blood elicited a negative reaction. The study of the blood cells revealed nothing significant, and the urinalysis gave negative results.

DISCUSSION

DR. NELSON PAUL ANDERSON: I object to the diagnosis of lichen planus. This is a classic case of Hallopeau's lichen sclerosus et atrophicus. I think that one gets onto debatable ground when the diagnosis of lichen planus also is made.

DR. SAMUEL AYRES JR.: The lesions on the left wrist showed only atrophic types. There were lichenoid lesions which showed definite atrophy, but on the left wrist I saw two lesions definitely characteristic of lichen planus. They were shiny papules of a violaceous color.

DR. STANLEY CHAMBERS: I should like to support Dr. Ayres' conclusions.

DR. PAUL FOSTER: This man stated that he had had somewhat similar lesions on the penis several times in the past. That, in conjunction with the lichenoid appearance of the present lesions on his wrist, would suggest the possibility of lichen planus. The distribution of the primary lesions is unusual, being of a cartwheel type. This suggests dermatitis factitia.

DR. HAL FREEMAN: From the literature I found that lichen sclerosus et atrophicus produces papular lesions with a central hyperkeratotic plugging. Some authors consider lichen planus with atrophic lesions and lichen sclerosus et atrophicus synonymous. I thought that some one might mention a scleroderma guttatum.

A Case for Diagnosis (Xanthelasma Papulosum Multiplex?). Presented by DR. MAX POPPER (by invitation).

H. L. is a woman whose past history reveals that as a child she had scarlet fever and pneumonia. More recently she has had cholecystitis, arthritis and heart trouble. There have been two rectal operations in the past two years. Abscessed upper teeth were removed three years ago. There was an appendectomy thirty-

five years ago. Five years ago there was a uterine curettement for the treatment of a chronic discharge. A miscarriage occurred seventeen years ago. She has had syphilis. She completed two years of antisyphilitic treatment about seven years ago. The Wassermann reaction of the blood was strongly positive eight years ago, but it has been negative since then. The Wassermann reaction of the spinal fluid was negative.

The present lesions made their appearance on the right buttock two weeks after the healing of what seemed to be the fourth attack of herpes simplex on the same area. This was six months ago. There was no sensation of itching or tenderness early in the course of the disease, but more recently there has been tenderness enough to produce pain on sitting.

The lesions are undergoing spontaneous improvement. As regression takes place, papules become bluish, less elevated and eventually ill defined dull red macules.

The chief lesions are located on the buttocks and backs of the thighs. Some lesions extend around the thighs and downward to the vicinity of the patella. There are more lesions on the right than on the left. There are scattered lesions on the right arm and forearm and on the palms and wrists and a few on the legs, but the face, trunk and left arm are free. Individual lesions are 2 to 5 mm. in diameter and raised about 2 mm. above the general surface of the skin. The lesions are firm and red and do not tend to be confluent even where they are most numerous.

Quantitative determinations of the blood cholesterol have been normal. Quantitative determinations of the blood sugar have all been normal, including determinations when the patient was fasting and when given a measured amount of sugar in the sugar tolerance test. The urine has also been normal.

A biopsy revealed in the corium increased amounts of fibrous tissue infiltrated with xanthoma cells and a few lymphocytes.

DISCUSSION

DR. NELSON PAUL ANDERSON: The microscopic section is typical of xanthoma.

DR. HAL FREEMAN: I should certainly like to hear some discussion on the infectious nature of the disease. I am not acquainted with an infectious element in xanthoma.

DR. SAMUEL AYRES: I had the opportunity of seeing this patient with Dr. Popper a month or two ago. At that time the lesions looked like the usual ones of xanthoma diabeticorum. Apparently a competent internist said there was no diabetes, although the dextrose tolerance test at the end of four hours showed 138 mg. of sugar per hundred cubic centimeters of blood. This would suggest some kind of a metabolic irregularity, even though one might not call it true diabetes. The lesions are small, suggesting this type of disease. Whether it is to be segregated from the true xanthoma diabeticorum I am not sufficiently acquainted with the problem to say.

DR. MAX POPPER (by invitation): I want to point out that the start of the disease was peculiar. About five months ago the patient had an inflammatory process on the right buttock, a redness with swelling and pustules. Three weeks later this rash disappeared, and two weeks later a papular eruption developed, starting on the same site and gradually spreading on both buttocks and going down the thighs. Then I examined the histologic picture. It showed circumscribed nodules infiltrated with foam cells. Now you have seen a comparative picture. Most of the papules have almost disappeared. They are flat, and the yellow color is almost gone. I could not find a case of similar type in the literature. No treatment was given. I consider that the disease is a self limited inflammatory process in which the infecting agent, supposedly a virus, causes a change in the invaded cells so that the cells can store lipoid substances temporarily. The localization was chiefly on the buttocks and thighs, with a few lesions on the elbow and right arm.

A Case for Diagnosis (Progressive Pigmentary Dermatosis [Schamberg's Disease]?). Presented by DR. HAL E. FREEMAN.

D. M., a man aged 22 years, began to have an eruption on the anterior surface of the right leg about five years ago. This has progressed since then. It is asymptomatic. There is no history of injury initiating its onset.

There is an erythematosquamous eruption approximately palm sized on the anterior surface of the right leg. This is reddish brown and shows telangiectases. It is macular and papular, and its margins fade into the normal surrounding skin.

The time of bleeding and clotting of the blood were normal. The hemoglobin content of the blood was normal. A blood count revealed normal numbers of red and white cells. On examination the urine was normal. Kahn and Hinton reactions of the blood were negative. A determination of ascorbic acid in the blood revealed 1 mg. per hundred cubic centimeters.

DISCUSSION

DR. CHRIS HALLORAN: If this is a case of the so-called progressive pigmentary dermatosis of Schamberg, it does not conform clinically to the ones I have seen. This patient presents a palm-sized lesion on the shin, and there is another lesion, of the size of a coin, on the ankle. In the cases of Schamberg's progressive pigmentary dermatitis which I have observed the eruption began about the ankles and sprayed upward over the lower third of the leg.

DR. M. E. OBERMAYER: Purely clinical discussions of such cases without microscopic sections are futile. I suggest a biopsy.

DR. NELSON PAUL ANDERSON: Whenever a case of Schamberg's progressive pigmentary dermatosis is presented, I am reminded of the remarks of Dr. Henry Michelson, who said that he knew of no other eruption more productive of futile discussion than this. In this particular patient, who is rather young to have a stasis dermatitis, these lesions are actually due to trauma. This man works at a job where his right leg every now and then gets a blow from a metal bar. I believe that this trauma is the cause of the cutaneous changes over the shin. I suspect that the lesion on the ankle is probably due to some other type of injury. I have not the slightest idea what has caused the lesion on the left leg. I think that most of the pictures of capillaritis which one sees on the legs are either á stasis dermatitis or due to some trauma. As regards therapy, I should like to suggest the administration of ascorbic acid. I have observed considerable benefit from this vitamin in some recent cases in which the capillaritis was bilateral and widespread, extending from the ankles to the knees.

A Case for Diagnosis (Synovial Pseudocysts?). Presented by DR. M. E. OBERMAYER.

B. K., a young private in the Army, has had tender nodes on the right heel, the plantar surface of the great toe and the anterior portion of the right sole for five

months. The pain has varied. On some days it was pronounced; on others, absent. He thought that he noticed an increase in the size of the lesions. After my examination he was transferred to Bushnell General Hospital, Brigham City, Utah, to the care of Captain W. J. Marginson. Additional subcutaneous nodes were found present on the patient's buttocks. Nodes were removed for biopsy from the right hypothenar region and from the right gluteal region.

The examination shows tender subcutaneous nodules which vary from 1 to 3 cm. in diameter on the sole and the plantar surface of the right great toe and over the articulations between the distal and the adjacent phalanges of the index fingers and thumbs as well as in the hypothenar region. On palpation these lesions seem to be fluctuant.

A tentative diagnosis of synovial pseudocysts was made, but treatment was not applied.

The section from the lesion in the gluteal region showed a slight local fibrosis and a small amount of a cellular infiltrate consisting of a few lymphocytes, mononuclear cells and an occasional plasma cell loosely arranged in a small cluster. The section from the hypothenar region showed no abnormal changes except a few lymphocytes close to the epidermal-dermal junction. The comment by the chief of laboratory service, Lieut. Col. F. B. Queen, was: "The cause of neither of these lesions is clear. The lesion from the gluteal region might be healed suppurative panniculitis. This is purely speculation, as it cannot be so diagnosed from the lesion itself. The nature of the hypothenar lesion is unknown." The sections were reviewed by the Army Medical Museum, in Washington, D. C. The comments by Lieut. Col. Baldwin Lucke are: "The lesion from the hand is suggestive histopathologically of keratoderma palmare. The genesis of the fibrosis in the subcutaneous fat of the biopsy from the gluteal region is not clear to us either. There is a concomitant nonspecific low grade dermatitis."

The slides presented were loaned to me by courtesy of Captain W. J. Morginson, M. C., A. U. S.

DISCUSSION

DR. HAL FREEMAN: I propose the diagnosis of dermatomyositis.

DR. SAMUEL AYRES: I have no clear concept of the lesions. The closest would be some type of inflammatory process. Apparently none of these lesions have progressed or regressed. None of them have become very large. The largest one is on the buttock. The lesions are rather vague and rather deep.

DR. M. E. OBERMAYER: When this patient was first seen, he did not tell me about the nodules on his hips, and, as the lesions on his fingers gave the impression of being slightly fluctuant, I thought of the possibility of synovial pseudocysts. With this preliminary diagnosis he went to the Army hospital where his eruption was extensively studied. Unfortunately, the microscopic picture of the excised lesions is as little characteristic as the clinical appearance. I agree with Dr. Ayres that the process is undoubtedly one which involves the subcutaneous tissue, but there is not sufficient evidence to call it nonsuppurative panniculitis, though the disease may belong to this rather ill defined group of dermatoses.

Lupus Erythematosus and Psoriasis Coexisting in the Same Patient. Presented by DR. KENDAL FROST.

E. E., a woman aged 57, has had lesions on the right cheek since the summer of 1942. Similar lesions have come and gone on the nose and left ear for two years. She has had hard red scaling lesions on the right elbow for more than ten years.

Around the eyes and across the nose are several erythematous sharply marginated scaly lesions. There is slight atrophy and telangiectasia. On the right elbow is an infiltrated erythematous scaly papular plaque typical of psoriasis. There are pitting and irregular deformity of the nails.

Biopsy of a facial lesion showed a moderate amount of perivascular infiltration and a tendency to disorganization of the basal cell layer. Large follicular plugs were present in the hyperkeratotic epidermis.

Improvement in the facial lesions was produced after she was given injections of gold and bismuth preparations from February to August 1943. She took a rest from treatment on her own advice. In November 1943 there was a relapse. She was then given bismuth and liver intramuscularly at weekly intervals for ten weeks, with no improvement. Medication was changed to gold in February 1944. The lupus erythematosus lesions on the face have improved considerably since then.

DISCUSSION

DR. CHRIS HALLORAN: I agree with the diagnosis. The lesions of the elbow are certainly psoriasis, and that of the cheek clinically is lupus erythematosus. A few years ago I saw a patient with a small plaque on the bridge of the nose, the center of which looked epitheliomatous. A biopsy showed epithelioma. The entire small plaque was destroyed. Recently the patient has returned with typical lesions of lupus erythematosus on both sides of the bridge of the nose.

DR. M. E. OBERMAYER: I had the opportunity of seeing this patient several times before the biopsy was performed, and I did not believe then that she had lupus erythematosus but considered her facial lesions part of her psoriasis. Examination of the microscopic section, however, has convinced me that Dr. Frost's original diagnosis was correct.

DR. L. F. X. WILHELM: I wonder whether the patient had psoriasis before the lupus erythematosus and, if she did, whether the use of sun treatment could have been a large factor in the onset of the lupus erythematosus.

DR. NELSON PAUL ANDERSON: It is difficult to make a diagnosis of two cutaneous diseases at one time when both are of an inflammatory nature. I believe that the lesions on the face are the same as those on the elbows. I looked at the section but did not study it carefully. However, I did not feel that it was typical of lupus erythematosus. Whether the patient has psoriasis or not I am not prepared to say. There are psoriasiform lesions on the elbow, but whether they are true psoriasis or not I do not know.

DR. PAUL FOSTER: Some years ago, Dr. McKee and I wrote a paper called "The Aberrant Lesions of Psoriasis." We found that in psoriatic patients there were many lesions which did not take the form of psoriasis but frequently took the form of lichen planus or lupus erythematosus. We made biopsies of all these lesions, and it was our experience that the study of the microscopic slide confirmed the diagnosis from the clinical appearance of the lesion. It seems to me that about 4 per cent of the patients had lesions which appeared to be lichen planus and about 2 per cent had lesions which appeared to be lupus erythematosus. Drs. Frazier and Satenstein confirmed our study of those microscopic sections.

DR. W. H. GOECKERMAN: Several years ago Dr. Montgomery and I presented such a case before a number of dermatologic societies. The discussions always varied. We had several biopsies, and Dr. Montgomery was never satisfied with a diagnosis. I published the report anyhow, because it was an unusual case (Goeckerman, W. H.: Psoriasis Associated with Lupus Erythematosus, *M. Clin. North America* **15**: 1491-1496 [May] 1932). Some who saw the patient favored the diagnosis of lupus erythematosus; others were inclined to the diagnosis of a combination of lupus erythematosus and psoriasis to explain the eruption.

DR. KENDAL FROST: I feel that these processes are separate. The patient has had the psoriasis on the elbows and the changes of the nails for many years and the facial lesions only two years. I should have a biopsy specimen from the elbow as well as from the face, and the study of the two would clarify the situation. The lesions of the elbow and finger nails have cleared considerably in the last few weeks after some roentgen ray treatments. I do not see why a person cannot have two chronic inflammatory skin diseases at the same time. Her facial lesions were almost clear last fall, when she voluntarily stopped treatment. She later returned with the process showing considerable activity. She did not respond to bismuth but has responded to gold. I do not think the lupus erythematosus and the psoriasis lesions are related.

Herpes Simplex of Buttocks. Presented by DR. PAUL D. FOSTER.

B. B., a white woman aged 58, presents several reddish macules on the right buttock. Some of these appear to be of recent origin, while others are older and faded. Otherwise her appearance is that of a healthy woman. A general examination failed to demonstrate any abnormality.

About five years ago a group of stinging, burning lesions ½ inch (1.3 cm.) in diameter first developed on the patient's right buttock. Those lesions stayed for a week and disappeared. Six months later she had similar lesions on the buttocks. Since then there have been many recurrences. These have been especially numerous in the past two years. Two years ago she was given some injections of a bismuth preparation, which seemed to help. Then she was given smallpox vaccine and fractional doses of roentgen radiation weekly for six weeks. Then there were no lesions for one year, but they have recurred again in the past six months. She had herpes zoster two years ago.

A blood count, urinalysis and determination of blood sugar gave normal values. Kahn and Kline tests of the blood elicited negative reactions.

Herpes Simplex of Buttocks. Presented by DR. PAUL D. FOSTER.

W. W. S., a woman aged 50, has never been seriously ill. Three years ago she began to have "blisters" on each buttock which "swelled up, felt hot and itched." She applied various remedies, such as calamine lotion and proprietary medicines. The lesions would subside and she would feel well, but the site of healed lesions would remain red. She had many exacerbations from two to six weeks apart and noted that the lesions were becoming more and more extensive, with more and more intense itching.

The patient is a healthy-appearing woman. She is intelligent and cooperative. There are erythematous plaquelike lesions over the buttocks and right thigh and in the intergluteal fold. On the left side there is a group of vesicles on an erythematous base. Only moderate dental caries are noted in the general physical examination. The results of laboratory examinations are all normal, including determination of hemoglobin, erythrocyte count and leukocyte count, urinalysis and determination of blood sugar. The Wassermann and Kahn reactions of the blood were negative.

In the past three months she has received nine 75 r doses of roentgen therapy localized to the buttock lesions. Seven weekly vaccinations by the intradermal method were performed. She has shown decided symptomatic improvement, with progressive objective healing. Local applications were limited to the use of an antipruritic powder shake lotion. Decided improvement has been achieved.

DISCUSSION OF THE CASES OF HERPES SIMPLEX

DR. H. C. L. LINDSAY: I agree with the diagnosis. I think it would be pretty hard to do anything of a therapeutic nature except with the vaccine.

DR. M. E. OBERMAYER: I have been interested for many years in the problem of recurrent herpes simplex. That the herpes virus is more prevalent than has been appreciated is shown by the high incidence of herpes simplex in patients receiving fever therapy. The absence of clinical lesions during the herpes-free intervals does not necessarily mean that the virus is not present in a latent stage. If it is assumed that it is living in the skin and becomes activated only under the influence of multiple precipitating factors, of which high temperature is one, it should be feasible to demonstrate its presence in loco during the latent stage. A method for doing this would be to mark one of the repeatedly involved sites with some indelible material, remove a biopsy specimen during the latent stage and inject tissue juice obtained from the specimen into a rabbit's cornea. The subsequent development of herpetic encephalitis in the rabbit would establish the presence of the virus beyond any doubt.

DR. PAUL FOSTER: These cases of persistent herpes simplex puzzle me. I have done everything I know of for the patients, and the lesions still remain. Neither of these women has been free of herpes at any time since I have seen them. One has been observed for three years and the other for five years. I have given one of them injections of smallpox vaccine beneath the areas on the buttock up to 0.5 cc. per injection. They have been treated daily for four weeks at a time. Each of them has had a full course of roentgen therapy and autogenous transfusions, and I did not know what else to do. I will try Dr. Obermayer's suggestion and report what happens.

A Case for Diagnosis (Mycosis Fungoides; Leukemia Cutis?). Presented by DR. SAMUEL AYRES JR.

I. S., a woman aged 73, presents an eruption widely scattered over the trunk and to a less extent on the arms. It consists of some ill defined lesions and other sharply defined erythematous plaques. Their size ranges from that of a dime to that of a palm. Some are superficial, and some are infiltrated. The infiltrated lesions are scaly. There are several such lesions on the soles.

The amount of hemoglobin and the number of erythrocytes and leukocytes were normal. Direct microscopic examination of scales from the soles failed to reveal fungi. A biopsy bears out the clinical impression of lymphoblastoma. In the cutis there is a zone of round cell infiltration having the tendency of grouping into "nests."

The generalized itching eruption began about two years ago. There was a thyroidectomy twenty years ago. The present illness began with an oval lesion under the right arm which gradually enlarged. Then new lesions began to appear on the trunk. Some fractional doses of roentgen radiation have been applied. A powder shake lotion has been used locally, and use of phenolphthalein-containing medicaments has been discontinued.

DISCUSSION

DR. A. FLETCHER HALL: I thought that the plaques were suggestive of mycosis fungoides except for the color, and I assume that that has been changed by the roentgen ray treatment. It was otherwise clinically suggestive of that disease.

DR. SAMUEL AYRES: I should appreciate hearing whether any one has anything else to suggest except roentgen rays. Has any one used sulfonamide compounds for treatment of diseases in the lymphoblastoma group? (No one had used sulfonamide compounds.)

A Case for Diagnosis (Seborrheic Dermatitis?).
Presented by DR. PAUL D. FOSTER.

J. H. B., a man aged 28, three years ago began to notice the development of the lesions on the sides of the nose which he now presents. In a few months these had spread over the face and forehead, and later they appeared on the back of the hands. He presented himself for treatment in April 1943, and he was completely cleared in August 1943. Four months later the lesions recurred on the back of the neck, and since then they have spread over the face, axillas, forehead, hands and forearms. Constant peeling and itching is characteristic of all lesions. Roentgen therapy has been used locally. The patient has received a preparation containing arsenic and bismuth given intramuscularly.

His general appearance is healthy, and he is intelligent and cooperative. He has numerous maculopapular erythematous patches which are slightly scaly. They range from 1 to 3 cm. in diameter and are distributed over the face, forehead and arms. The general physical examination reveals normal conditions. Results of all laboratory tests, including erythrocyte and leukocyte counts, hemoglobin determination, urinalysis and blood sugar determination, were normal. The Wassermann and Kahn reactions of the blood were negative.

DISCUSSION

DR. MAX POPPER (by invitation): I have seen a rather large number of patients with eruptions which started out as a seborrheic dermatitis and then developed into lupus erythematosus. None of these had atrophy, and the eruptions seemed more closely to resemble dermatitis seborrheica, because the patient had an extensive seborrhea of the scalp at the same time. I should treat the scalp at the same time.

DR. CHRIS HALLORAN: In some respects the lesions suggested lupus erythematosus, but in others they strongly suggested seborrhea. One does not expect to see seborrhea in a circinate, plaquelike arrangement.

DR. A. FLETCHER HALL: Although lupus erythematosus and seborrheic dermatitis come first to one's mind on observing this case, I was not satisfied with either diagnosis. The man works in a supervisory capacity on the production line in an aircraft factory. He has been given patch tests with zinc chromate in dry form, with a negative reaction. The resins in this primer cause capricious types of contact dermatitis, and, although this eruption is not typical of the type one usually sees from the resins, I think that he should be given patch tests with them, although he says that he had a negative reaction to the scrapings. When the resins do produce a dermatitis, a great many things suggest that it is produced by vaporized resins. The eruption appears particularly around the face, nose and eyelids, where this man has constant trouble. This eruption has disappeared at times and then reappeared. We have found that it acts in this way sometimes, depending on the freshness of the primer coat on the metal when it gets to his station. Such a dermatitis may be present for long periods when the metals are freshly coated, and then, owing to some change in the production schedule, the primer will be drier when it gets to him and the dermatitis will subside. People who do the drilling have this dermatitis constantly, but a foreman, such as this man, may not have such constant contact. It does come and go. I believe this is consistent with a dermatitis of that origin, and I would suggest that he be tested to the resins.

DR. HAL FREEMAN: On examining this patient, I thought of contact dermatitis due to zinc chromate from the appearance of the lesions. I asked him about contacts at work. I agree with Dr. Hall's remarks.

DR. STANLEY CHAMBERS: I was impressed with the same points brought out by Dr. Hall. One frequently sees this particular clinical picture, a dermatitis from zinc chromate superimposed on a seborrheic background.

DR. H. C. L. LINDSAY: This is psoriasis of a seborrheic type. If it were a chromate dermatitis, it would continue as long as the man keeps working, and he says that it comes in the winter and goes away in the summer.

DR. PAUL FOSTER: This man has an eruption which on his first visit to the office I considered to be seborrheic dermatitis, but as nothing that has been done has helped him at all, I am not so sure about the diagnosis. It is worthy of note that this man is particularly free of seborrheic dermatitis of the scalp, and I have never seen him at any time when he had a seborrhea of the scalp. At one time he had an eruption in the axilla which I considered to be a seborrheic dermatitis. He still has that lesion, and it has not improved with any form of therapy. He has had at least twelve roentgen treatments. Salicylic acid and sulfur ointment, ammoniated mercury and tar ointment have been used locally. There has been no improvement. It is my first case of seborrheic dermatitis, if that is the diagnosis, that has not responded to some of these forms of treatment. The biopsy is not suggestive of a premycotic mycosis fungoides or lymphoblastoma. I appreciate the discussion, especially Dr. Hall's remarks as regards the resins used in the airplane industry. I shall test the patient's tolerance to zinc chromate and other paint resins and report at a later meeting.

NOTE.—A strong positive reaction to a patch test with zinc chromate was reported for this patient by Dr. Foster at the next meeting.

MANHATTAN DERMATOLOGIC SOCIETY

ANTHONY C. CIPOLLARO, M.D., *President*

WILBERT SACHS, M.D., *Secretary*

March 14, 1944

Congenital Cyst of Frontal Bone. Presented by DR. MAURICE J. COSTELLO.

J. S., a girl 7 months old, was first seen by me on Dec. 21, 1943, because of a nevus simplex in the suboccipital region. At a subsequent visit her mother drew attention to a round, solid, bony prominence, the size of a cherry pit, in the region of the inner half of the left eyebrow. When the infant arched her eyebrows, a bony depression, or defect, could be seen just medial to this area.

DISCUSSION

DR. DAVID BLOOM: This is a dermoid cyst, which is found most frequently in this region, which corresponds embryologically to the region of the branchial cleft, where developmental disturbances take place.

DR. HERMAN SHARLIT: Does Dr. Bloom mean that these are deposits of cholesterol?

DR. DAVID BLOOM: No, they are cysts which contain sebaceous glands and hair, and they may contain coil glands also and even teeth.

DR. MAX SCHEER: Can the diagnosis of osseous cyst be made without a roentgenographic examination? And how can it be differentiated from an osteoma, which I think it is?

DR. E. WILLIAM ABRAMOWITZ: I am inclined to agree with the diagnosis of dermoid cyst. It might be advisable to make roentgenograms of all the bones in order to exclude the presence of other osseous lesions, such as appear in Albright's syndrome and other entities.

DR. ANTHONY C. CIPOLLARO: The lesion involves bone structure; it is either a cyst or an osteoma, rather than an atheroma or a dermoid cyst.

DR. MAURICE J. COSTELLO: I believe that this is a congenital cyst, due to some embryologic defect the nature of which is obscure.

Scleroderma and Acrosclerosis. Presented by DR. E. WILLIAM ABRAMOWITZ.

Mrs. B. S., a Jewish woman aged 28, was born in the United States. Soon after the birth of her child, about two and a half years ago, she noticed an eruption on her right hand, which has since spread to various parts of her body. She had no previous illnesses.

The patient now presents a definite hidebound condition of the fingers and extending to her elbows and on her face and extending down to the clavicular region, shoulders, chest, abdomen, hips, groins and legs. The characteristics of Raynaud's disease were present last winter and also this year. Her toes are livid.

She has had mecholyl iontophoresis and dihydrotachysterol, with little result. She is presented for suggestions as to further treatment.

DISCUSSION

DR. MAURICE J. COSTELLO: I agree with the diagnosis. I believe that the acrosclerosis is part of the clinical picture of scleroderma. I suggest that large doses of dihydrotachysterol be administered to this patient.

DR. GEORGE M. LEWIS: To many competent observers, acrosclerosis has not been adequately established as a separate entity.

DR. MAX SCHEER: I agree with Dr. Lewis that such cases are cases of scleroderma. The acrosclerosis is simply a peculiarity of localization to the extremities.

DR. E. WILLIAM ABRAMOWITZ: There are some unusual features that I should like to consider. The patient looks younger than she actually is. Her hair is prematurely gray. There is hypertrichosis of the arms and legs, and with the sclerodactylia the picture resembles what has been described as Werner's syndrome and points to some endocrine disturbance. The patient has not responded to dihydrotachysterol or mecholyl iontophoresis. She has been studied with every possible means, including electroencephalography, at the vascular clinic of the New York Post-Graduate Medical School and Hospital. I have confidence in the efficacy of massage and baking. As to the word "acrosclerosis," I feel that the term is redundant. Scleroderma and acrosclerosis are probably the same process. As to the question of operating on the parathyroids, I believe that this measure is being abandoned. I am considering sympathectomy to give her relief.

Tinea Capitis. Presented by DR. ANTHONY C. CIPOLLARO.

F. D., a boy aged 9, consulted me on Oct. 11, 1943 because of an area of baldness in the occipital region of several weeks' duration. Examination under Wood's light revealed a patch of tinea capitis in the occipital area, about the size of a silver dollar. There was no evidence of fluorescent hairs elsewhere. A culture showed the fungus to be Microsporon audouini. On October 13 the patient was again examined under Wood's light, and there was no evidence of fluorescent hairs except in the patch in the occipital region. A dose of 340 r of low voltage unfiltered roentgen rays was applied to the affected area. This was 12 per cent greater than the dose usually employed, because only a small area of the scalp was being epilated. The area was carefully covered with moleskin adhesive plaster. On October 20 he was again examined under Wood's light, and there were no fluorescent hairs except on the affected areas. On November 3 there were some fluorescent hairs remaining in the occipital region, and several patches of fluorescent hairs were found on other portions of the scalp. He was treated with various topical remedies and by manual epilation until November 26, but the disease became progressively worse.

On November 29 the entire scalp was given an epilating dose of roentgen rays (300 r) with the five point technic of Kienböck and Adamson, and on December 20 there was complete, uniform epilation all over the scalp. The patient has been observed weekly. Various topical remedies have been used, and on Feb. 16, 1944 there was still evidence of tinea capitis. Treatment with salicylic and benzoic acids in a penetrating solution was begun.

DISCUSSION

DR. GEORGE M. LEWIS: First of all, this shows the bad results sometimes obtained by treating one part of the scalp. The technic which Miss Hopper and I have recently published (Lewis, G. M., and Hopper, M. E.: Ringworm of Scalp; Successful Use of Roentgen Rays to Epilate Local Areas of Infection. ARCH. DERMAT. & SYPH. **49**:107 [Feb.] 1944) is often successful, but one runs the risk of just this sort of result. We still think it is worth while in selected cases, particularly

for older children with no recent spread. We now keep the scalp covered with grease between the time of epilation and shedding of the hair and prohibit washing of the scalp during these three weeks. A little grease is applied every day, and the area is kept covered with cellophane or wax paper and a stockinet headpiece. I admire the courage of Dr. Cipollaro in giving a second treatment with roentgen rays for epilation six weeks after the first treatment. I still lean toward conservatism and believe that six months should elapse between epilations. The hair has apparently been stimulated at the site of the two epilations, and this is worthy of further study.

DR. MAURICE J. COSTELLO: The result obtained by Dr. Cipollaro in this case is paradoxic. It is nevertheless interesting and may be significant. I have seen this type of regrowth in patches formerly affected by fungus infection. It is a fairly common experience after epilation to find stimulation of growth in patches formerly affected by tinea; the hairs in these patches grow faster and are stronger than in those areas not similarly affected. The regrowth in this case occurred in a patch formerly involved by tinea capitis.

DR. ANTHONY C. CIPOLLARO: This is the most interesting phenomenon I have ever encountered in radiology. Two epilating doses of roentgen rays applied to the occipital area with an interval of six weeks between doses produced an apparent increase in growth of hair on that portion receiving the larger dose. It is also interesting to note that 600 r applied in two sittings with an interval of six weeks did not prevent regrowth of hair. I have no explanation for this unusual occurrence.

A Case for Diagnosis (Chronic Lymphangitis; Rhinoscleroma?). Presented by DR. E. WILLIAM ABRAMOWITZ.

A. J., a white woman 32 years old, was born in the United States but lived in the West Indies for several years when a child. She is subject to yearly streptococcic infections of the throat, although her tonsils were removed at the age of 6. She first noticed a discharge from lumps on the sides of her nose about fifteen years ago. Thereafter she noticed that the skin on the bridge of the nose had hardened. Ever since that time the patient has been subject to attacks of redness on the bridge of her nose every other day. The rhinologist reported an infected sinus which was treated with a sulfonamide compound in solution and sprays. There has been some improvement in the nasal cavity but not in the appearance of the cutaneous lesion. The mucous membrane of the nasal cavity shows no sign of sclerosis.

DISCUSSION

DR. GEORGE M. LEWIS: This is a difficult case to discuss from the point of view of exact diagnosis. The cultures have not yet been reported. A biopsy would be of interest if Dr. Abramowitz could get one.

DR. MAURICE J. COSTELLO: I think that this eruption is due to chronic lymph stasis, possibly dating from the time that the patient had an operation on her nose. It is commonly referred to as solid edema.

DR. HERMAN SHARLIT: I agree with Dr. Costello.

DR. WILBERT SACHS: I agree with the diagnosis of lymphangitis, because if the disease were rhinoscleroma there would be considerable changes in the nose and mucous membranes.

DR. E. WILLIAM ABRAMOWITZ: The patient lived in the South American area, and rhinoscleroma is endemic in San Salvador. The rhinologist says the nasal condition has improved. I am inclined to agree with the members that the diagnosis should probably be lymphangitis, but I feel that I should make a smear to rule out rhinoscleroma, as the tissues over the nose are hard to the touch.

Recurrent Erythema Multiforme Confined to One Finger. Presented by DR. GEORGE M. LEWIS.

S. K., a man aged 44, was first seen on Dec. 28, 1943, while he was in New York Hospital, under the care of Dr. Gardner Childs, for treatment of an infection secondary to his cutaneous lesion.

According to his history, the patient has had a lesion at the same site on the right index finger once, sometimes twice, a year for the past ten years. There is always an associated lymphangitis and frequently a high fever. The attacks last about one week. They usually occur in December but occasionally in the spring as well. The lesions appear as erythematous circinate elevations surmounted by a bulla. On March 9 the patient became aware of a beginning lesion. He was given 0.5 Gm. of sulfathiazole internally three times a day.

DISCUSSION

DR. MAX SCHEER: I agree with Dr. Rosen that this is recurrent erysipelas.

DR. E. WILLIAM ABRAMOWITZ: I should also be inclined to exclude erythema multiforme. Dr. Lewis states that the lesion subsided under treatment with a sulfonamide compound, and this fact is in favor of a possible erysipelatous infection.

DR. MAURICE J. COSTELLO: I should like to suggest to Dr. Lewis the possibility of the diagnosis of herpes simplex. Patients have been presented before this Society with this eruption on the terminal phalanges, recurring two or three times a year. It might be interesting the next time this eruption recurs to scrape some of the vesicular fluid into the cornea of a rabbit. Recurrence in 1 of the reported patients was prevented only by the administration of a sulfonamide compound given at the beginning of an attack.

DR. HERMAN SHARLIT: I think that Dr. Lewis' judgments carry a consistent type of medical reasoning, and I believe that physicians have seen more and more diseases which are infectious and episodic that can be inhibited or cured. As to the locations in which herpes simplex occurs most frequently, the hands are second to the face. If the sulfonamide compounds can inactivate and abort such lesions, they should be employed.

DR. GEORGE M. LEWIS: The lesion which I saw in December was a typical iris lesion, and no one would consider any other diagnosis than erythema multiforme. The absence of a history of ingestion of drugs, the fact that the lesion is of a fixed type and the presence of infected tonsils are pertinent points. There was never any indication of herpes simplex in this lesion seen tonight or in the former lesion, and from a close questioning of the patient there is nothing to suggest that diagnosis in prior attacks.

Acrodermatitis Perstans of Hallopeau Treated Successfully with Tyrothricin. Presented by DR. MAURICE J. COSTELLO.

M. M., an Italian plasterer aged 44, lacerated the second, third and fourth fingers of the right hand in

November 1943, when a wine jug broke in his hands. At the sites of the lacerations, which were treated at the time with sulfathiazole powder, circumscribed areas of dermatitis developed, consisting of granulomatous tissue exuding a seropurulent discharge and having a somewhat foul odor. This persisted and progressed in spite of many forms of therapy, including wet dressings of solutions of aluminum acetate, of boric acid and of potassium permanganate and administration of zinc peroxide and roentgen rays.

On Feb. 16, 1944, after the application of the electric cautery to one of the pyogenic-granuloma-like masses on the tip of the third finger, a dressing of 5 per cent sulfathiazole ointment was applied. In twenty-four hours there was intense edema and vesicular dermatitis involving this finger and the dorsum of the right hand. His family physician, thinking that the patient had acquired a superimposed streptococcic infection, administered one dose of sodium sulfadiazine intravenously to the patient. Within several hours fever, headache and a generalized, discrete papulovesicular eruption developed, which was more evident on the exposed areas of the body, especially on the forehead, face and neck above the collar line. There was a linear area of vesiculation on the left cubital space, where a band of adhesive tape had been applied after the injection had been given. One may assume that there had been leakage of the drug from the syringe. A roentgenogram of the fingers of the right hand on February 28, showed no osseous changes. About March 1 the patient began to apply wet dressings of tyrothricin (Squibb), which contains gramicidin and tyrocidin in water. The solution was made up of 1 part tyrothricin and 4 parts isotonic solution of sodium chloride. Immediate improvement followed.

DISCUSSION

DR. E. WILLIAM ABRAMOWITZ: I think that splendid results are obtained with this new antibiotic. I had a chance to use tyrothricin in a case of varicose ulcer secondarily infected, with apparently good results.

DR. GEORGE M. LEWIS: I am glad to know about this case, and, since this disease is most recalcitrant to treat, I shall certainly try this form of therapy for other patients.

DR. MAURICE J. COSTELLO: I thought that this patient had acrodermatitis perstans, because he had an injury followed by infections that were persistent and resistant to all forms of treatment. Three days after the patient received tyrothricin, the eruption began to improve.

Mycosis Fungoides. Presented by DR. ANTHONY C. CIPOLLARO.

F. B., a man aged 54, was previously presented before this Society on April 12, 1938 (ARCH. DERMAT. & SYPH. **38**:636 [Oct.] 1938). The patient is re-presented because of the development of painful lesions on the soles, which have interfered with his walking, and also for suggestions as to therapy.

The eruption on the right sole has bothered him for several months. The lesion is scaly and slightly exudative and the edges are somewhat infiltrated. The eruption has not been getting progressively worse, but there have been periods of remission and exacerbation. The patient still has a few scattered infiltrated plaques arranged in circles and portions of circles.

Biopsy performed on April 28, 1938, showed a superficial dermatitis. A recent hematologic study by Dr. Rosenthal showed no abnormalities, and a recent complete physical examination, including laboratory studies by Dr. Rosenthal and Dr. Rubenstone, Philadelphia, revealed normal conditions.

DISCUSSION

DR. HERMAN SHARLIT: I feel that the lesion on the sole has an unusual appearance for any variation of mycosis fungoides, and one would have to inspect it under the microscope for suggestions as to what else it might be.

DR. MAURICE J. COSTELLO: I agree with the diagnosis of mycosis fungoides, but there is one thing missing. The patient has no pruritus whatsoever.

DR. GEORGE M. LEWIS: The fact that the lesions disappear in the summer in sunlight makes one question whether the disease is mycosis fungoides, especially since the histologic observations do not confirm the diagnosis. I am not at all certain about the lesions on the foot. A culture might be important.

DR. DAVID BLOOM: Some lesions resemble mycosis fungoides; others, psoriasis. I think that it is important to establish definitely the diagnosis, and I advise another biopsy. If it is mycosis fungoides, one would be justified in giving roentgen ray treatment as often as necessary, while psoriasis should be treated in other ways.

DR. WILBERT SACHS: Tonight I should not make a diagnosis of mycosis fungoides, because of the clinical appearance of the lesions, because they do not itch and because they go away with ultraviolet as well as roentgen irradiation. Yet I cannot help recalling those patients of Dr. Chargin's who he insisted had mycosis fungoides. Many biopsies were performed, none showing mycosis fungoides, until finally in 1 patient a definite picture of that disease developed. It would not surprise me if this patient finally showed typical mycosis fungoides.

DR. E. WILLIAM ABRAMOWITZ: It is known that cases have been reported in which psoriasis was present for many years, and then the mycosis fungoides developed. Just now some of the lesions resemble psoriasis nodularis. Itching is not necessary in mycosis fungoides. The lesion on the foot can be considered as part of the picture. Bullous lesions have been described in mycosis fungoides. There is a possibility of malignancy.

DR. ANTHONY C. CIPOLLARO: An ordinary case of mycosis fungoides would not have been interesting. I presented this patient because he has lesions resembling those of other diseases. When he was first presented, he had a few lesions more typical of those of mycosis fungoides than those present tonight. There were definite ulcerative lesions arranged in semicircular form and round plaques of various sizes. The members agreed then that it was a typical case of mycosis fungoides, in spite of the fact that biopsy did not then confirm the diagnosis. I have watched the patient and am finally convinced that hers is a mild form of the disease, kept under control by ultraviolet irradiation and roentgen rays, and that the lesions on the sole are of the bullous type of mycosis fungoides. I shall perform a culture to determine whether there is a fungous infection, although I personally do not believe there is. NOTE.—A biopsy showed mycosis fungoides.

CHICAGO DERMATOLOGICAL SOCIETY

L. M. WIEDER, M.D., *President*

MARCUS R. CARO, M.D., *Secretary*

March 15, 1944

Acanthosis Nigricans, Juvenile Type. Presented (by invitation) by DR. S. ROTHMAN and DR. A. L. SHAPIRO.

H. A., a girl aged 15, first noted darkening of the skin on the nape of the neck about three years ago. Since then, similar lesions have appeared on the upper part of the back, in both axillas, in the intermammary region and on the thighs and perineum.

She has been overweight and tall all her life. Her intelligence has always been above normal. Menstruation began at the age of twelve and has always been normal. The administration of thyroid had no effect on obesity or cutaneous changes.

The father (aged 47) has diabetes. The mother (aged 36) is obese but otherwise healthy. There are two normal siblings.

A physical examination revealed no organic disease except the cutaneous lesions and a "buffalo" type of obesity. The weight is 220 pounds (99.8 Kg.) and the height is 68 inches (173 cm.). The blood pressure at rest is 126 systolic and 98 diastolic.

The cutaneous lesions consist of plaques of papillary hypertrophy and pigmentation in the locations mentioned previously. Papillomas are present within these areas. Striae are present on the abdomen. There are mild acne and some roughening of the cheeks.

The dopa reaction was weakly positive. The silver stain revealed definite hyperpigmentation.

Examination of the urine and blood revealed no pathologic changes. The basal metabolic rate was determined on several occasions and was between —18 and —21 per cent. The dextrose tolerance test in 1943 revealed decreased tolerance (fasting value 110 mg. per hundred cubic centimeters, one-half hour value 190 mg., one hour value 190 mg., two hour value 110 mg. and three hour value 90 mg.); in 1944 the tolerance was within normal limits. No glycosuria was observed during these tests. The blood cholesterol level was 230 mg. per hundred cubic centimeters in 1943 and 180 mg. in 1944 (within normal limits). The whole blood of the patient was tested for the presence of melanophore hormone by the hypophysectomized frog method; this test yielded a negative result.

The roentgenographic examination of the skull revealed normal bones and sella turcica; that of the left wrist showed premature closing of the distal radial epiphyses.

DISCUSSION

DR. S. W. BECKER: I believe that this is a typical example of the juvenile type of acanthosis nigricans. The girl is obese, a condition which is usually found in association with this disease. She has always been obese, and the mother is also overweight. This girl does not present any abnormality in sugar tolerance, but often such changes are not found.

DR. THEODORE CORNBLEET: It can be assumed that probably the chromaffin system is the site for development of the phenomena present here, whether through the pressure of tissue incident to corpulency or from a new growth. On the chance that the latter is the case, it would be well to continue watching this patient.

DR. S. ROTHMAN (by invitation): Reviewing the literature, one finds that in the majority of cases of this type the tolerance for dextrose is just at the border line of pathologic decrease. Sometimes there is alimentary glycosuria, but there is no true diabetes. It is striking how much the patients look alike. In the juvenile form, malignant neoplasms have never been found. Three cases were reported, however, in which 1 of the parents died early from carcinoma (ARCH. DERMAT. & SYPH. **48**:468 [Oct.] 1943).

The opinion of the endocrinologists is that it is impossible to investigate this disease from any angle of endocrinology. Probably a growth-promoting factor is present, which is formed in malignant tumors as well as by some anomaly of the pituitary gland. In both cases this factor may lead to the same type of epidermal hyperplasia.

Tuberculosis Miliaris Disseminata Faciei. Presented (by invitation) by DR. MAURICE OPPENHEIM and DR. DAVID COHEN.

J. M., a white woman aged 24, had always been in good health except for having acne vulgaris of the face for a short time. About the middle of November 1943 nodules appeared, and in two weeks they covered the entire face. Since that time, only a few new nodules have appeared on the neck and face, particularly on the lateral mandibular areas. The lesions caused itching during the developmental stage.

Almost the entire face is covered by round red-brown and brown nodules ranging from the size of a hempseed to that of a pea. The consistency of the nodules is soft. An impression made with the end of a probe remains as a little dell. The lesions are grouped about the lids and in other areas. On diascopic pressure they present an apple-jelly-like yellowish brown color. There are no scales or crusts on the top. A few of the nodules have a yellow point in the center. There is mild itching. No confluence is present.

The histologic examination showed epithelioid tubercles with few giant cells and lymphocytic infiltration around and on some areas of necrosis.

The general physical examination revealed no abnormalities. The blood and urine were normal.

DISCUSSION

DR. H. E. MICHELSON, Minneapolis: This particular form of cutaneous tuberculosis is rare, even though it is often included in the discussions. I think that the members realize that few examples of true tuberculosis miliaris disseminata faciei have been exhibited. The disease was recognized by the early French and German writers, and Arndt wrote a splendid article some twenty-five years ago. Since then, the publication of Peck gives the latest contributions. Clinically, the characteristics are miniature, discrete, deep-seated lupous papules which are elevated above the suface of the skin. They do not form plaques. They often occur on the lower eyelids and the upper lip but, strangely, are not associated with lesions elsewhere. Each lesion runs its own course; hence lesions in all stages from incipiency through scarring are present after the disease is well established. Even though there may be softening in the center, there is no crusting, and the lesions heal without sloughing. Most of the labile forms of cutaneous tuberculosis occur in crops, and recurrence is the rule; but in cases of tuberculosis miliaris disseminata. I have never seen recurrence. In spite of the fact that most authors claim a characteristic histologic pattern with central caseation necrosis, my experience

has taught me that this characteristic is by no means consistently present. There has been much discussion of the proper classification of this disease. Dr. Laymon and I have decided that it possesses all the characteristics of a tuberculid, and we proposed the name "lupoid papular tuberculid." Treatment probably is not necessary, as the patients get well, but it takes a long time, sometimes more than a year. Gold salts seem to help. Use of the microcautery will of course destroy individual lesions, but it does not bring about the local resistance that natural healing does. Healing after cauterization is slow.

DR. RUBEN NOMLAND, Iowa City: Miliary sarcoid in Negroes can look a good deal like tuberculosis miliaris disseminata faciei clinically but microscopically will show a definite sarcoid picture.

DR. C. W. FINNERUD: I should like to ask Dr. Oppenheim about the relative frequency of this type of tuberculosis in Austria. I was impressed by the fact that it was actually common in Kren's, Kyrle's, Riehl's Artz's and Oppenheim's clinics. I have seen very few cases in the United States.

DR. S. ROTHMAN (by invitation): In a patient under my observation (*Zentralbl. f. Haut- u. Geschlechtskr.* **20**:544, 1926), the lesions were stable and remained unchanged for five to six years. They could be completely destroyed by cauterization so as not to recur. I agree with Dr. Michelson that the absence of relapses in loco distinguishes this disease sharply from lupus vulgaris. Tuberculosis miliaris disseminata is torpid, like sarcoid.

DR. MAURICE OPPENHEIM (by invitation): In Vienna and Austria there are many more cases of this type than there are here. I have seen only 1 case in Chicago previously.

I read the paper of Laymon and Michelson and I believe that they are right when they stress that tuberculosis miliaris disseminata lies between lupus vulgaris and papulonecrotic tuberculid. Dr. Michelson introduced the name of miliary papular tuberculid. Kaposi first described this clinical picture under the name of "acne telangiectodes," because the nodules showed yellow points in the center. These yellow points correspond histologically to central caseation; hence, a typical tubercle gives the clinical picture, and the disease was called lupus folliculosis disseminatus. But there was no connection with the follicles; hence, the final name was set as tuberculosis miliaris disseminata. I should say that the nodules clinically look much like the nodules of lupus vulgaris.

In differential diagnosis differentiation is to be made from sarcoid of Boeck and nodular syphilis. But both of these disease lack the so-called probe pressure symptom. If one makes an impression with the point of a probe the dell stays a long time in a lupous nodule. In lesions of sarcoid and of syphilis, in which the infiltration is much more intense, either it is impossible to make an impression or the dell is immediately flattened out. One can see in some nodules a little yellow point, and this yellow point means caseation. I am sorry that in the presentation made today the histologic specimen was not very good, but one can see epithelioid tubercles with a few giant cells.

Regarding therapy, I agree with Dr. Michelson that there are almost no recurrences after treatment, and that the involution of these nodules is gradual. I observed this woman for two weeks, and I saw some of the nodules disappear. My treatment in this case consists of acetarsone. In my experience the phenylarsones have an influence on tuberculosis of the skin and also on lupus erythematosus.

A Case for Diagnosis (Pemphigus?). Presented by DR. MAURICE DORNE.

Mrs. M. P., aged 60, first noticed a bald spot on the top of the head in October 1940. She applied iodine, and after the application vesicles and bullae appeared at the site and on the body. She was treated, and about one and one-half years ago the lesions disappeared. Six months later similar lesions appeared in the mouth and on the lips after the extraction of her teeth. She was treated with various local applications and with injections and, prior to consulting me, had received about ten roentgen ray treatments to the lips.

An examination revealed a dollar-sized erythematous atrophic patch on the vertex of the scalp and numerous pigmented and depigmented patches on the shoulders, arms, scapular regions and back. The skin is dry. The greater portion of the lips are covered with crusted, verrucous-like patches. There is a single bulla on the hard palate and another on the under surface of the tongue.

The Kahn reaction of the blood was negative. Results of examination of the peripheral blood were as follows: hemoglobin content, 82 per cent; erythrocytes, 3,780,000; and leukocytes, 10,000, with a differential distribution of 68 per cent neutrophils, 8 per cent eosinophils, 30 per cent lymphocytes, 1 per cent basophils and 1 per cent monocytes.

DISCUSSION

DR. M. H. EBERT: Clinically, when I first looked at this patient I thought she had an extensive cheilitis glandularis apostematosa with crusting. When I had her open her mouth and looked back at the mucosa, I could see vesicles and bullae on the posterior surface of the hard palate and pharynx and similar lesions on the buccal mucosa. She had some reddening of the scalp, but that was nonspecific clinically. Then I read the history and found that she has had multiple bullae on the skin as well as in the mouth. From the history of the first lesion in the scalp, which appeared after the application of tincture of iodine, I believe that it seems to fulfil Dr. Oppenheim's criteria for the primary lesion of pemphigus vulgaris. I agree with the diagnosis that it is a case of pemphigus vulgaris.

DR. C. W. FINNERUD: I first saw this patient at the time of her first attack several years ago. According to the history she gave at that time, she had a bullous lesion on the scalp which she repeatedly painted with tincture of iodine. Thereafter, bullous lesions in general distribution developed in the mouth. She was given an arsenical and large doses of vitamin D, which within a few months cleared the lesions completely. I understand that she remained free of lesions up to the time of the present attack. I thought that she had pemphigus.

DR. JAMES H. MITCHELL: Dr. Scull and I had this patient under observation all last year. We never presented her case because we never knew what her disease was.

DR. RALPH H. SCULL: The specimen for the biopsy that I made, when she was a patient at Rush Medical College, was prepared by the general pathologic department and, unfortunately, it had been cut in the wrong direction. However, the changes were those of a banal type of infiltrate. There was nothing observed that would lead one to think of pemphigus as a diagnosis.

DR. M. H. EBERT: When you first saw the patient, were the lesions on the lips the striking feature, as they are today?

DR. JAMES H. MITCHELL: Not nearly so striking. I have a colored picture that I made a year ago. At that time the lesions on the scalp and on the lips made us consider lupus erythematosus, but we never arrived at a differential diagnosis.

DR. MAURICE OPPENHEIM (by invitation): In this case one has a typical example of a primary lesion in chronic pemphigus (Oppenheim, O. M., and Cohen, D.: Primary Lesions of Pemphigus Vulgaris, ARCH. DERMAT. & SYPH. **46**:201-206 [Aug.] 1942). Four years ago the patient had crusted lesions on the scalp which healed after a rather long time with a scar and with loss of hair. After a long interval, the generalized bullous rash appeared. The scalp is a typical location for a primary lesion of pemphigus. Others are the mucous membrane of the mouth and the umbilicus. If the primary lesion is located in the mouth, the prognosis is bad, because usually this is the initial symptom of pemphigus vegetans. Primary lesions of pemphigus during recent years were observed by M. J. White, Oliver, Ebert, Zakon and others.

DR. CLINTON W. LANE, St. Louis: It is with hesitancy that the following remarks are made, in view of the much longer period in which this patient has been observed by other dermatologists. However, the patient stated to me that the initial symptom on the scalp was baldness. To the bald patch, tincture of iodine was applied; after this, blisters appeared for the first time. With the history and the presence of an atrophic, irregular, diffuse and faint erythematous area of alopecia, a diagnosis of pseudopelade in the early stage is suggested.

DR. MAURICE DORNE: I originally thought that the clinical findings were consistent with pemphigus and therefore instituted treatment with acetarsone administered orally. The duration of treatment has not been sufficient to permit any definite conclusions, but the lesion on the lips had shown a noticeable improvement and then became worse again while under treatment.

Hyperpigmentation of Abdomen (Von Gierckе's Disease; Hyperinsulinism?). Presented by DR. THEODORE CORNBLEET and (by invitation) DR. HENRY C. SCHORR.

L. C., a married white woman aged 30, about four years ago observed discoloration on her abdomen simultaneously with the occurrence of pains in the right upper quadrant and the epigastrium. The following year, she was operated on for a tumor mass in the epigastrium, which was found to be due to an enlarged liver. Biopsy of the liver showed abnormal deposits of glycogen. In January of this year she was again observed, because of recurrence of the pains in the right upper quadrant of the abdomen and epigastrium and nausea and vomiting. A blood sugar tolerance curve was found to be abnormally flat, and, after a study of the various laboratory data and physical examinations, it was thought that the proper diagnosis was hyperinsulinism. All the laboratory data were more or less within the normal ranges for the various tests made. The leukocyte count was 13,300. The blood sugar tolerance curves were definitely abnormal. The diastase test on the blood showed 64 units (upper normal is 32). The fasting blood sugar level was 100 mg. per hundred cubic centimeters.

The examination of the skin shows the abdomen to be diffusely pigmented as far as the the thorax and down to the groins.

DISCUSSION

DR. THEODORE CORNBLEET: Von Gierckе's disease is clinically characterized by hepatomegaly and enlargement of the heart and, occasionally, of the kidneys (almost exclusively in children). It is anatomically characterized by deposition of glycogen in the liver, spleen and heart muscle. Glycogen in the tissues is quickly destroyed by the diastatic enzymes present, which leads to the formation of sugars. Functionally, von Gierckе's disease is characterized by the inability of diastase enzyme to split glycogen, which, in turn, leads to enlargement of the organs.

Biopsy specimen from this woman's liver was found filled with glycogen. On this account, von Gierckе's disease was thought to be a possibility. Other possibilities suggested were tumor of the pancreas and hyperinsulinism. Speaking in favor of the latter hypothesis were two episodes of hypoglycemic shock. The dextrose tolerance curve was flat, and this was exaggerated in the double dextrose tolerance curve, which evidence supported the diagnosis further. In any event, some enlargement of the abdominal viscera probably is producing pressure on chromaffin structures. Fibrosis without actual tumor formation has been seen to give rise to pigmentary phenomena. The mechanism whereby these abdominal changes induce pigmentation is of course unknown. This patient is to be operated on shortly, and it is hoped that this will clarify the situation.

A Case for Diagnosis (Lichen Sclerosus et Atrophicus; Morphea?). Presented by DR. J. H. MITCHELL and DR. R. H. SCULL.

M. K., a white girl aged 9 years, presents an eruption that has been present for two years. The mother states that the skin of the right shoulder was first involved and healed spontaneously. Later, lesions appeared on the face and scalp.

On examination, there is a more or less linear pigmented depressed scar near the right shoulder blade. On the right side of the face, there are slightly elevated bluish lesions intermingled with some white faded areas.

The laboratory reports on blood and urine revealed no abnormalities.

The biopsy of a specimen from one of the areas of the scalp showed a thinning of the epithelium with obliterations of the rete pegs. The subepithelial layer showed a homogenization of the collagenous fibers. Deep in the corium, there was a round cell perifollicular infiltrate.

DISCUSSION

DR. F. E. SENEAR: I thought of the possibility of the patient's having lichen sclerosus or morphea. It seemed that the atrophy was not as whitish as is seen in lichen sclerosus. Clinically it was closer to morphea, especially with the hematrophy in that location.

DR. RALPH H. SCULL (demonstrating the section): There is an almost complete obliteration of the rete pegs. The subepithelial fibers are compressed. There is a round cell perifollicular infiltrate. The section taken from the part that was bluish showed only a thinning of the epithelium.

DR. LOUIE H. WINER, Minneapolis: There is no distinct homogenization of the upper part of the cutis papillaris such as one finds in lichen sclerosus et atrophicus. Also, there is not the bandlike lymphocytic

infiltration shown beneath this homogenized area that is typical of lichen sclerosus. There is an infiltrate around the vessels such as is seen in morphea. This type of infiltration occurs with enlargement of the individual fibers, as Dr. Scull mentioned. I favor a diagnosis of morphea.

DR. R. H. SCULL: Considering the clinical and histologic picture, we favored the diagnosis of circumscribed scleroderma.

Von Recklinghausen's Disease. Presented by DR. M. H. EBERT and (by invitation) DR. M. OTSUKA.

M. K., a Negro girl aged 16, presents cutaneous changes of various types: (1) deep chocolate-colored macules of varying size which are darker than the surrounding skin and scattered over the trunk, including a large area over the sacrum; (2) soft, compressible cutaneous tumors which can be invaginated; (3) a great number of subcutaneous nodules varying in size from that of a buckshot to that of a crabapple (these are spherical or spindle shaped, firm and movable, and some of the larger ones are tender); (4) a soft, doughy tumor on the right side of the forehead extending from the glabella to the hair line; (5) mottled bluish pigmentation of the sclera of both eyes and also of the palpebral conjunctiva of the right lower lid; (6) a movable mass the size of a hazelnut in the parotid region of both sides.

On examination the eyegrounds were normal. Roentgenographic examination of the skull, the long bones, the ribs and the chest disclosed no abnormalities.

The mother is living and accompanies the girl. Both are of average intelligence for their social status. The father is dead of an unknown cause. He is said to have had "bumps" on his body. The mother gave birth to ten children. All died in infancy except three. The oldest child, now 31 years old, had a hemiplegia on the left side when 10 years old. The other living brother is in the United States Army.

DISCUSSION

LIEUT. COL. EVERETT R. SEALE, M.C., A.U.S. (by invitation): This is a rather unusual case. The lesions are deeper than are usually seen. There are few on the surface of the skin.

DR. M. H. EBERT: I consider this to be an unusual variety of von Recklinghausen's disease. This patient presents multiple subcutaneous tumors about the nerves, some of which are definitely tender on palpation. The boggy mass over the right eyebrow is sometimes called a cirsoid lesion by neuropathologists. They consider it a diffuse involvement of the nerves of the corium. It is curious that the mass always occurs over one or the other half of the brow, as it has done in this case.

There was nothing unusual about the sections. The silver impregnation methods demonstrated few nerve fibers in the lesion. At one time there was much discussion as to the origin of the tissue in such lesions—whether it was connective tissue of neurodermal origin or of ectodermal origin, derived from Schwann's sheath. I believe at present the general opinion is that the tumor is a mixture of these two types of tissues.

Hunt's Syndrome. Presented by DR. DAVID V. OMENS and (by invitation) DR. HAROLD D. OMENS.

U. S., a Jewish cobbler aged 49, was seen for the first time on Feb. 26, 1944. He presented a vesicopustular eruption, limited to the left side of the face and appearing in groups of variable sizes, and an involvement of the buccal surface of the cheek, the soft palate and half of the tongue. The eruption ended abruptly in the center of the face.

The patient returned on March 7, when he presented a paralysis of the involved area which is still present. Since last seen, otic symptoms have developed.

DISCUSSION

DR. M. H. EBERT: I have been particularly interested in this type of case. I think that some members will recall that I presented a patient with involvement of the geniculate ganglion in association with Bell's palsy. The patient was a physician and was shown about two years ago (ARCH. DERMAT. & SYPH. **47**:464 [Oct.] 1943). In the present case, the man complained of pain in the ear but of no particular dizziness or nausea or diminution of hearing on that side, which is sometimes present. He did complain of extreme pain. If it is known that there is involvement of the gasserian ganglion such symptoms offer no trouble in diagnosis. Patients with such symptoms are usually seen by otologists, and papers have appeared about them in the journals of otology and laryngology.

DR. S. ROTHMAN (by invitation): The most peculiar feature of this case is that the second and third divisions of the fifth nerve are involved at the same time. I never saw herpes zoster with such arrangement. Usually there is isolated involvement of either the second or the third division. Otherwise, there is a complete analogy to the cases which Dr. Ebert has presented.

Blastomycosis. Presented by DR. THEODORE CORNBLEET and (by invitation) DR. M. OTSUKA.

W. J., a Negro man aged 58, states that nine months ago his entire left foot became painful and swollen. Two weeks later he observed an almond-sized raised pinkish lesion on the lateral aspect of his left leg. This lesion had multiple sinuses from which gelatinous and yellowish pus exuded. He had been working as an oiler in a defense plant for the past year.

The patient states that he had a chancre at the age of 18 but has never received any antisyphilitic treatment.

Physical examination shows that his right pupil is larger than the left, but they both react to light. There is also a mild bilateral cervical adenopathy. His deep reflexes are greatly diminished bilaterally. On the lateral aspect of the left leg just above the external malleolus, there is a lemon-sized ulcer with a verrucous-looking raw base with a well elevated border. On the upper part of the left shin, there is a palm-sized dull red, painful swelling. The left inguinal nodes are slightly swollen and painful to external pressure.

The examination of the blood showed 82 per cent hemoglobin, 4,800,000 erythrocytes and 6,300 leukocytes. The Kahn reaction was negative, and the blood chemistry was essentially normal, as was the urine.

Blastomycotic organisms were found in the sodium hydroxide preparation of the pus.

DISCUSSION

DR. M. J. REUTER, Milwaukee: I have had a patient with systemic blastomycosis under observation for about three years. He had a fever, a 40 pound (18.1 Kg.) loss of weight, involvement of one knee joint and cutaneous lesions. With massive doses of iodides (450 grains [29.1 Gm.] daily) all objective symptoms disappeared, and the patient has now been apparently well for two years.

DR. LOUIE H. WINER, Minneapolis: I want to mention that the histologic section definitely showed blastomycetes.

DR. C. H. STUBENRAUCH JR. (by invitation): Recently a patient in the medical service at the University of Illinois was seen in consultation by members of the department of dermatology. This man had been coughing for some time, and a consolidated area was demonstrable on roentgen examination. He had several follicular pustules on the face. Some of these lesions were surrounded by a peculiar bluish halo, which suggested the possibility of blastomycosis. On microscopic examination of pus from these lesions, typical budding organisms were found in large numbers. Later a large number of these follicular pustules developed on the trunk and extremities. Blastomycetes were demonstrable in all the lesions examined microscopically. At a later date, the fungus was also found in the sputum and in material obtained by puncture of a lung.

DR. THEODORE CORNBLEET: The original interest in this patient was not confined to the lesion on his leg, which was that of the ordinary kind of localized blastomycosis. When I first saw him, he had, in addition, multiple small abscesses. They made me think of the possibility that they reflected a systemic blastomycosis. On one knee, there is a thickened edematous pigmented area which is almost fluctuant. This is not the knee on which the verrucous lesion is located. That change, too, may represent a systemic blastomycosis. Time will determine this.

Cushing's Syndome. Presented (by invitation) by DR. S. ROTHMAN and DR. Z. FELSHER.

M. R., a 23 year old man, was in apparent good health until one year ago, when he began to have rather severe frontal headaches. His weight increased from 190 to 216 pounds (86.2 to 98 Kg.), and he noted the development of purplish striae over the hips, thighs and medial aspects of the knees. In the past three months, his face has become more flushed than usual.

In December 1943, a physician told him that he had sugar in the urine and gave him thyroid extract.

The physical examination showed obesity, noticeably flushed face, large purplish striae over the hips, thighs and medial aspects of the knees, single follicular pustules with hyperkeratotic plugs scattered over the trunk and extremities and hypertrichosis at unusual sites, such as the nape of the neck and sacral region. The blood pressure was 160 systolic and 120 diastolic.

Fluoroscopic examination revealed enlargement of the heart to the left.

The patient was admitted to Albert Merritt Billings Hospital yesterday; therefore, only a few laboratory examinations could be made. There was a trace of sugar in the urine; the nonfasting blood sugar level was 84 mg. per hundred cubic centimeters, and the blood cholesterol level was 176 mg.

DISCUSSION

DR. M. H. EBERT: Some years ago, when I published a paper on hypertrophic striae in which I advanced the idea that there was some toxic effect on the elastic tissue, causing changes which made it less resistant to stretching, I received a personal letter from Dr. Harvey Cushing telling me about his ideas on the subject and stating that he had made similar observations on patients like those seen today, with Cushing's disease. He was interested that a similar condition on a smaller and milder scale had been noticed in adolescent girls with mild endocrine disturbance.

Mycosis Fungoides in a Negro. Presented by DR. M. H. EBERT and (by invitation) DR. M. OTSUKA.

G. G., a Negro aged 68, five years ago noticed on the right thigh an itching patch which would come and go. In the next two years new lesions gradually appeared on the lower extremities. Itching has always been present. The patient's average weight was 155 pounds (70.3 Kg.), but it is now 130 pounds (59 Kg.). There has been no significant loss of strength.

There are large plaques of horseshoe and kidney shape, with infiltrated borders and hyperpigmented atrophic centers. The lesions on the thigh are most infiltrated. There is a little general adenopathy. The eyegrounds are normal.

The examination of the blood showed 50 per cent hemoglobin, 3,970,000 erythrocytes and 7,800 leukocytes, with a differential distribution of 74 per cent polymorphnuclears, 20 per cent lymphocytes, 4 per cent monocytes and 2 per cent eosinophils. A roentgenogram of the chest showed no abnormalities. The urine and the basal metabolic rate were normal, and the Kahn and Wassermann reactions were negative.

Specimens for biopsy were taken from the infiltrated plaque on the right thigh and from the margin of the superficial lesion on the right scapula. There was some excoriation present in the latter area. The histologic observations were characteristic of mycosis fungoides.

The report on the sternal puncture indicated active granulopoiesis and a shift to the right. The number of plasma cells was definitely increased. Dr. Schwartz stated that such changes are nonspecific and are compatible with chronic marrow stimulation. There was a reversal of the normal albumin-globulin ratio in the blood serum.

DISCUSSION

DR. LOUIE H. WINER, Minneapolis: I agree with the diagnosis. The tendency of the mycosis fungoides infiltrate (which I think comes from histiocytes) to go on from the histiocyte stage and form plasma cells and phagocytes containing cellular debris was noted in the section and favors the diagnosis of mycosis fungoides. At the same time, the biopsy of the lymph node showed none of the changes found in Hodgkin's disease—that is, none of the replacement phenomena, not even the replacement of lymph follicles by reticulum. Hence, I think that Hodgkin's disease and mycosis fungoides are definitely two different entities.

LIEUT. COL. EVERETT R. SEALE, M.C., A.U.S. (by invitation): The whole lymphoblastoma group of diseases is extremely rare in the South. I have never seen mycosis fungoides in a Negro. I think that in Houston every one in town, including the personnel of the clinic, see no more than one person with lymphoblastoma a year.

DR. F. E. SENEAR: I should like to say that the young woman with mycosis fungoides whom we presented last month has been given treatment and now, at the end of four weeks, shows striking involution of the lesions and definite improvement.

DR. THEODORE CORNBLEET: It is advisable to consider the aspects of radiation therapy, such as sites, interval and intensity, that are compatible with the patient's comfort and yet provide for the greatest longevity. These may not be the aspects that induce the most complete disappearance of the lesions in the least time. There have been some observations made of patients with leukemia, for example, which make one believe that these two goals cannot be reached at the same time.

DR. M. H. EBERT: This case was presented primarily for two reasons. One was that, as stated, mycosis fun-

goides in the Negro race is rare. This is the third case that we have presented within the last few years. The first 2 had fatal outcomes. The second reason was that in this case there are the classic kidney-shaped lesions that are commonly described. In many cases of mycosis fungoides presented here, these lesions are not present. Sternal puncture was made, and there were no specific observations. A biopsy of the node was also made, with the expectation that there might be an associated Hodgkin's disease.

In regard to the section which was made this morning, which I had not seen, the biopsy specimens were taken from two places: one, the infiltrated border, and the other, a less infiltrated area. In the section which I saw, there was the textbook picture of mycosis fungoides, with cells of all sizes and fungating nuclei and nuclear fragments and everything one would expect to find. I have not examined the other section.

DR. LOUIE H. WINER, Minneapolis: I simply want to make the point that mycosis fungoides, which is classified as lymphoblastoma from a clinical standpoint, originates from reticulum from a genetic standpoint. Some think that both Hodgkin's disease and mycosis fungoides start from the same place, the reticulum. In mycosis fungoides the reticulum cells form histiocytes, whereas in Hodgkin's disease they go on to form the Sternberg-Reed cells, or giant cells.

DR. CLINTON W. LANE, St. Louis: I do not believe that I have seen mycosis fungoides in a Negro patient in St. Louis in the last fifteen years.

Leukomelanoderma Following Arsenical Dermatitis (Malignant Melanoma). Presented (by invitation) by DR. S. ROTHMAN and DR. Z. FELSHER.

S. P., a 53 year old man of Greek extraction, was admitted to Albert Merritt Billings Hospital in November 1941 with arsenical dermatitis, damage to the liver and hemorrhagic encephalitis, after treatment elsewhere with neoarsphenamine for latent syphilis. He had received one injection of 0.6 Gm. of neoarsphenamine and six injections of 0.9 Gm. of neoarsphenamine weekly before the eruption appeared. The dermatitis healed with spotted melanosis and depigmentation. The dopa reaction of the depigmented areas was negative. From February 1942 on, the patient has had courses of intramuscular injections of bismuth subsalicylate in oil at regular intervals. The Wassermann and Kahn reactions became negative in September 1942, but since that time he has occasionally had weakly or doubtfully positive Kahn reactions. The spinal fluid was normal. In August 1943, eighteen months after his arsenical dermatitis cleared, a hard nodule appeared in the left axilla, which grew rapidly. Biopsy revealed a malignant melanoma. The tumor was broadly excised. Roentgenographic examination on Feb. 28, 1944 showed pulmonary metastases. The patient is now receiving roentgen therapy.

DISCUSSION

DR. S. W. BECKER: I saw this man some years ago, when he first came to the University of Chicago, with exfoliative dermatitis after the administration of neoarsphenamine. There has been a tendency on the part of some writers to confuse leukomelanoderma with vitiligo. The diseases really have nothing in common. The former disease is the result of inflammatory action, and usually the pigment never returns. If patches of vitiligo are treated early enough, there is a possibility of restoration of the melanin. The lymph node which was removed from this patient's axilla shows typical malignant melanoma of the so-called melanosarcoma type. I examined the part of the body drained by the node and could find no site of a primary lesion. While the patient could not speak English, his interpreter said that he had had no lesion treated which could be interpreted as a primary melanoma. There are only two parts of the body, the skin and the eyes (with the exception of the meninges) where melanoma will originate. It may be that further observation will give more information as to its source. At present I can see no evidence of a primary lesion.

I consider vitiligo to be a functional impairment of the pigment of the skin. I have had several patients who were treated soon after the appearance of the first lesions. I treat such patients as I would any one with a functional disease; in other words, I consider the lesion as a perversion of a sense of fatigue. The regimen includes plenty of rest, generalized ultraviolet irradiation and blistering of the lesion with ultraviolet rays. Often a fair recovery results. After several years the condition seems irreversible.

DR. C. W. FINNERUD: Although I am sure that everything as presented is correct, I was wondering whether the pigmented areas had been examined under potassium hydroxide or sodium hydroxide for pityriasis versicolor. I noted that a large amount of fine scales could be scraped off with a dull penknife from those patches.

DR. S. ROTHMAN (by invitation): I felt that it was an important question as to whether the malignant melanoma in this case might have originated from the hyperpigmented spots of the leukomelanoderma. Many cases of postarsenical leukomelanoderma were reported, particularly from Germany, in the years between 1920 and 1930, when larger single and total doses of arsphenamine were given than is in the present routine dosage. There is no mention of a single case in which a melanoma had developed subsequently. As Dr. Becker pointed out, the tumor removed from the axilla was a lymph node metastasis. The primary tumor must have been in the skin. In the course of his postarsenical dermatitis, the patient had numerous severe pyogenic lesions, furuncles and hydradenitis, and several of the last-named lesions in the left axilla were incised. Thus, an additional traumatic factor may be considered in the development of the malignant tumor. This patient was one of my subjects in the study on vitiligo (ARCH. DERMAT. & SYPH. **48**:400-410 [Oct.] 1943). The white spots were absolutely free of melanin and were dopa negative.

Answering Dr. Finnerud's question, I agree that there has been some scaling, but I did not think of pityriasis versicolor.

A Case for Diagnosis (Seborrheic Dermatitis?). Presented by DR. THEODORE CORNBLEET and (by invitation) DR. H. C. SCHORR and DR. DAVID COHEN.

S. F., a white man aged 38, has had an eruption on the upper part of his chest and back for two years. The lesions consist of a continuous scaling dry erythema. The affected areas are pale red, and the scale is flaky, comes off easily and is dry, not oily. There is practically no infiltration palpable, and the borders of the lesions are fairly sharply demarcated. There is no itching. Therapy elsewhere has not been successful in removing the eruption.

DISCUSSION

LIEUT. COL. EVERETT R. SEALE, M.C., A.U.S. (by invitation): I thought that the patient had seborrhea plus a dermatitis. This is probably one of the most

common lesions seen in the Army in the northern states during the winter. The combination of out-of-doors life, plus dry heat, woolen blankets and woolen clothing is probably the cause. These men always wear woolen underwear, which is irritating. For such dermatitis I formerly used olive oil, hydrous wool fat liquid petrolatum and solution of calcium hydroxide. I now find that solution of calcium hydroxide is satisfactory and much better than olive oil and the solution.

Psoriasis Simulating Stasis Dermatitis. Presented by DR. THEODORE CORNBLEET and (by invitation) DR. DAVID COHEN and DR. H. C. SCHORR.

K. B. L., a white man aged 46, has had lesions on his right leg for eight years. They consist of sheets of dermatitis which is dark red and scaly. The scales are dry and white and leave pinpoint bleeding when removed. There are no crusts present, and there is practically no itching. A few varicose veins can be seen. Therapy for several years directed toward the improvement of the circulation in the leg has not improved the cutaneous lesions.

DISCUSSION

DR. C. W. FINNERUD: All the lesions are certainly psoriasiform. I think that often there is a tendency to make a diagnosis of psoriasis for a noncrusting eruption of the legs when the disease is some form of stasis dermatitis or neurodermatitis. I feel that if this eruption were not in an area of stasis there would be little evidence of psoriasis. I should hesitate to accept the diagnosis in the absence of lesions of psoriasis elsewhere.

DR. THEODORE CORNBLEET: We intended to show a group of 4 patients, each with some unusual variety of psoriasis. Only 1 patient presented himself. When this man was in the Cook County Hospital last year, a biopsy was made. The tissue changes were those of psoriasis. A study group for histopathology was satisfied with this diagnosis. I am embarrassed not to have these slides at hand. Clinically, Auspitz's sign is well displayed. I believe that this man has psoriasis of a kind simulating a chronic stasis dermatitis.

A Case for Diagnosis (Neurotic Excoriations?). Presented by DR. JAMES H. MITCHELL and DR. R. H. SCULL.

M. L., a white woman aged 53, has had an eruption for twenty years. She states that it began on the face just before she entered a hospital for an operation. The original lesions began as deep-seated small nodules which would either disappear or come to the surface as red pustules that opened, drained and refilled. Since that time, similar lesions have appeared on the back, chest and thighs. Some would heal spontaneously after a time, leaving depressed round scars. There have been no subjective sensations. The patient's medical history is not significant except for a possible infection of the gallbladder.

On examination there were several erythematous crusting lesions from the size of a pinhead to that of a pea on the back, arms and right hand. There were also a number of depressed scars resulting from previous lesions over a period of years.

On examination the blood and urine were normal. Histologic examination of a specimen from one of the active lesions showed many giant celled tubercles in the corium, consisting of giant cells, round cells, plasma cells and young connective tissue cells.

DISCUSSION

DR. H. E. MICHELSON, Minneapolis: I think that one would have to spend a long time with this patient in order to arrive at a thorough understanding of her and of her eruption. Since she was presented for diagnosis, I felt justified in questioning her at some length; but I was aware that such a "third degree" method might injure her, and I was sorry that I was so persistent. I hope I did not arouse antagonism and resentment in her, which will make future handling more difficult.

The eruption began as an acneform folliculitis, which caused her to excoriate the lesions. She did so through her clothes and often unconsciously, becoming aware of the fact only when she saw blood on her linens. She did not abuse the skin of her face because she was afraid that that would jeopardize her position. (She is a clerk.) The histologic picture is that of a foreign body reaction and might lead one in the wrong direction in making a diagnosis. I think that her eruption should be called neurotic excoriations on a psychic basis. I am interested in the motivations in such persons. Some are purely physical. The patient has, let us say, acne and attempts to impove matters by excoriating the papules or comedos. This act becomes a habit and is continued even to extreme degrees of disfigurement. In order to understand patients whose motive lies in their emotional life, patience, persistence and knowledge of psychic processes are required. The physician must not be pleased with himself when he forces the patient into admission of self production of lesions. The history of such a case begins with the patient's birth, and, if one is interested in the relation between the psychic and the somatic symptoms, much can be elicited from the history. This woman is 1 of 4 children. She was born in Chicago, and she left high school in her second year. She suffered from inadequacy, which was interpreted as physical, and a diagnosis of tuberculosis was made, although no positive evidence was ever found. She went from physician to physician without finding uniformity of opinion; she became discouraged and took up Christian Science. At times, her depression was great. She was unable to work and contemplated suicide but could not go through with it. Then she began to excoriate her skin. Destruction of the skin as seen in dermatitis autophytica, is akin to suicide. The destructive motivation is there. All in all, the facts that I elicited from her seem to point to an emotionally unstable person with depressional tendencies and excoriations produced because of her disappointment in her ability to succeed and the resentment established. I well know that an interview of a few minutes is not conclusive. Such persons need a kindly, supportive psychic therapy, and no "strong arm" threatening admonitions to "stop picking at your skin." I hope that Drs. Mitchell and Scull will have a psychiatric report for presentation at a later meeting.

DR. LOUIE H. WINER, Minneapolis: I diagnosed this eruption from the microscopic section as neurotic excoriations. I have taken biopsies in all my cases, and I find a great many patients have a tubercle-like foreign body reaction deep in the cutis from embedded epidermis, which shows no connection with the more superficial covering epidermis.

DR. H. E. MICHELSON: This woman has had a persistent folliculitis. My interpretation of the slide is a foreign body reaction around the folliculitis in the epidermis. She had vesicles, including some acne-like ones, on the face.

DR. S. W. BECKER: I was inclined to think that this eruption might be a tuberculid. The type of patient discussed by Dr. Michelson has an unstable protoplasm and allergic diseases will develop in various tissues. The sections do not show the typical characteristics of a tuberculid, but there was a perivascular infiltrate. If the patient had neurotic excoriations, I believe that she would have lesions about the face and other parts of the body.

DR. J. H. MITCHELL: We saw this patient last summer, at which time she had lesions which were strongly suggestive of late syphilitic lesions. There were arcuate, annular lesions on the trunk. We discussed it at length with various diagnoses in mind, especially tuberculosis, excoriations and late syphilis. She was given considerable treatment, as I recall. I have not seen her for a long time, but with treatment she made pronounced improvement.

DR. RALPH H. SCULL: We had approached this patient with an open mind, because we had not been able to decide on any type of management. We did not fail to consider the possibility of neurotic excoriations or some other type of lesion by the patient—self mutilation. This patient has cooperated in trying to get cultures of some of the blisters. Many types of cultures were tried.

Two biopsies were made, one of a specimen from an active pustular lesion and one from a healing lesion. Biopsy of the active lesions showed many giant cell tubercles. There were perivascular and perifollicular cellular infiltrates consisting of round cells and leukocytes.

HAWAII DERMATOLOGICAL SOCIETY

JAMES T. WAYSON, M.D., *President* †

HARRY L. ARNOLD JR., M.D., *Secretary*

April 8, 1944

A Case for Diagnosis (Virus Papillomas in Burn Scars?). Presented by DR. HARRY L. ARNOLD JR.

J. R., a 50 year old white business executive, suffered a severe second and third degree burn of the hands, especially the left, on Feb. 27, 1944. Many of the nails were lost as a result of it and are regrowing.

Since removal of the petrolatum gauze dressings, a more or less solid growth of hard, dry, horny, yellowish, closely packed papillomas, 1 to 3 mm. in diameter, has been observed throughout most of the area of the scar in a streaked pattern. Some of the lesions have been desquamating more or less en masse.

DISCUSSION

CAPT. DAVID J. MUSMAN, M.C., A.U.S.: I am reminded of similar lesions which I saw a few weeks ago following a gasoline burn in a person with psoriasis. Although the papular element was less prominent, there was considerable hyperkeratosis.

MAJOR GERARD DE OREO, M.C., A.U.S.: I believe that perhaps the papilliferous appearance is a result of lymphedema occurring coincidentally with healing of the burns. I suggest the use of mild soaks and keratolytic applications.

† Dr. Wayson died Jan. 17, 1945.

Syphilitic Juxta-Articular Nodules Combined with Leukoderma of Wrists, Palms and Feet. Presented by DR. HARRY L. ARNOLD JR.

A. L., a 66 year old Chinese-Hawaiian woman, has had nodular growths, 2 to 6 cm. in diameter, in the regions of the right elbow and both ankles for about thirty years. They have never been painful or inflamed as far as she can recall. There has been irregular depigmentation about the wrists (chiefly the flexor surfaces) and palms and, to a lesser degree, about the ankles for about the same length of time.

The blood cholesterol level was 210 mg. per hundred cubic centimeters (normal). Histologic examination of a section from a nodule on the ankle revealed that it consisted chiefly of collagenous connective tissue, the central part of which was densely homogenized, so that it almost resembled cartilage. There was mild perivascular lymphocytic infiltration about the outer part of the section. The Kolmer, Wassermann and Eagle reactions of the serum were strongly positive (256 Eagle units).

A Case for Diagnosis (Purpura Annularis Telangiectodes [Majocchi]?). Presented by DR. HARRY L. ARNOLD JR.

H. Y., a 27 year old Japanese housewife, was first seen in February 1944 because of an eruption of fifteen years' duration, confined to the legs, chiefly the right. She described the initial lesions as being tiny red spots, first isolated, then grouped and then deeply pigmented.

She presents a profuse eruption, which is a mixture of petechiae, pigmented macules (many of the Cayenne pepper type) and atrophic scars, mostly grouped in dime-sized to quarter-sized areas; there is little tendency toward formation of annuli. There are several early lesions of the same sort on the left ankle. The entire right leg is moderately enlarged and warmer than the left one.

Results of the tourniquet test were negative on both an arm and a leg. The intradermal reaction to moccasin venom, diluted 1:3,000, on both an arm and a leg was negative (pink macules, with no ecchymosis) at one hour. The blood count showed mild hyperchromic anemia and normal white cell and differential counts; there was no eosinophilia. Platelets numbered 185,000 per cubic millimeter of blood. The bleeding time was two minutes; clotting time, four and a half minutes; clot retraction, normal, and prothrombin time, thirty-four seconds (normal). The urine was normal. The Kolmer, Wassermann and Eagle reactions were negative.

Histologic examination of a dime-sized purpuric and pigmented macule of only about two weeks' duration revealed the following picture: Beneath a relatively unaltered epidermis was a profuse polymorphous cellular infiltrate, principally of lymphocytes, eosinophils and neutrophils. These were located chiefly about arterioles, many of which showed hyperplasia of the intima and a narrowed lumen. Considerable yellowish brown pigment, principally phagocytosed, was present.

DISCUSSION

DR. HARRY L. ARNOLD JR.: I am inclined to feel that the purpura, pigmentation and atrophy suggest the diagnosis of purpura annularis telangiectodes, despite the lack of clearcut annulus formation.

LIEUT. COMDR. M. SILVERMAN, MC-V(S), U.S.N.R.: I agree with the diagnosis as presented. Although the case is not absolutely typical, I have never encountered one that was, and I think that it belongs among the cases of this general category.

DR. HAROLD M. JOHNSON: I suggest the diagnosis of purpuric pigmented lichenoid dermatitis of Gougerot and Blum.

CAPT. HERBERT LAWRENCE, M.C., A.U.S.: The histologic changes suggest a granuloma to me. I wonder whether leprosy was considered.

DR. HARRY L. ARNOLD JR.: It was not.

CAPT. L. H. ROSENTHAL, M.C., A.U.S.: I believe that the microscopic picture bears out Dr. Johnson's suggestion that the disease is purpuric pigmented lichenoid dermatitis.

MAJOR GERARD DE OREO, M.C., A.U.S.: I think that there are plenty of lichenoid papules, and I am also inclined to classify this case in the group of cases of chronic lichenoid purpura. Also, the increased size and warmth of the right leg suggest the possibility of an underlying vascular nevus.

CAPT. HERBERT LAWRENCE, M.C., A.U.S.: Can leprosy produce a purpuric picture?

MAJOR EDWIN K. CHUNG-HOON, M.C., A.U.S.: If it does, it must be extremely rare. Such a picture has not been seen in Hawaii.

Lupus Vulgaris. Presented by DR. HARRY L. ARNOLD JR.

K. S., a 55 year old Japanese woman, was first seen in March 1944, because of a lesion of two years' duration on the dorsum of the left forearm. This had begun at the edges of a burn scar and had spread slowly.

When seen, the lesion consisted of an irregularly oval atrophic scar, about 4 by 6 cm., with a broad, flat, smooth, dull red macule along both its proximal and its distal borders. No apple jelly nodules were apparent on diascopic examination. The Kolmer, Wassermann and Eagle reactions of the blood were negative. There was a 3 plus reaction to a first test strength dose of P. P. D. There was no thermal anesthesia. Roentgenograms of the chest showed pleural effusion on the left side. Histologic examination showed thickening of the epidermis and a dense infiltrate of lymphocytes, plasma cells, a few epithelioid cells and a few polymorphonuclear neutrophils. There were two or three ill defined epithelioid cell tubercles. No necrosis was seen. No acid-fast bacilli were demonstrated.

DISCUSSION

MAJOR GERARD DE OREO, M.C., A.U.S.: I accept the diagnosis and suggest treatment with injections of starch.

DR. HARRY L. ARNOLD JR.: It is my impression that injections of starch are advocated primarily for patients for whom excision and plastic surgical repair are not feasible. I wonder whether for this patient surgical intervention is not preferable.

MAJOR SOLOMON GREENBERG, M.C., A.U.S.: My own experience with injections of starch has not been particularly gratifying. I believe that excision and graft are preferable in this case.

A Case for Diagnosis (Psoriasis; Vesicular Lichen Planus; Herpes?). Presented by DR. HARRY L. ARNOLD JR.

G. H., a 29 year old white housewife, was first seen in December 1943, with lesions on the left calf only. She stated that these had been present intermittently for a little over two years. They were initially blisters, with only one or two appearing at a time, but lately they had become itchy and had been more numerous, flatter and redder than before. Each lesion lasted only a month or so and then healed, leaving no mark; sometimes new ones developed in the same site.

Examination revealed a half dozen circular, flat, deep red dime-sized macules within a palm-sized area on the left calf.

After two months' treatment the patient had a few new lesions and the old ones were not improved. Biopsy revealed at that time extensive formation of superficial vesicles; no eosinophils were noted; the vesicles were multilocular, and the basal cell layer of the epidermis was poorly defined, merging gradually into the cellular infiltrate beneath it. No parakeratosis was present. Paraffin sections yielded no additional information.

DISCUSSION

MAJOR GERARD DE OREO, M.C., A.U.S.: I believe that whatever else the patient has, she has psoriasis of both the scalp and the calves. The biopsy strongly suggests herpes simplex and, I think, in combination with the histologic structure, points to a possible explanation of her peculiar history. I believe that she may have recurrent herpes simplex, which is eliciting the Köbner phenomenon, so that each herpetic lesion is being followed by a patch of psoriasis, which appears to be pruritic.

DR. HARRY L. ARNOLD JR.: I am delighted with this convincing and rational explanation of what was to me a completely mysterious picture.

LIEUT. COMDR. M. SILVERMAN, MC-V(S), U.S.N.R.: I agree with Major De Oreo's explanation.

A Case for Diagnosis. Presented by DR. HAROLD M. JOHNSON.

C. J., a Filipino man aged 35, presents a dollar-sized infiltrated raised plaque on the left angle of his jaw, which has been present for about one year. The lesion has not subsided during the last three or four months. There has been no tendency toward pruritus, and no other symptoms have been noticed. There is no past history of tuberculosis or of any chronic infectious disease, and the patient has felt well during the last five years.

The patient was seen on March 2, 1944, at which time he presented an indurated erythematous dollar-sized plaque on the left angle of the jaw. No cervical adenopathy was present. There was no thermal or tactile anesthesia. A tuberculin test elicited a negative reaction. Biopsy showed the underlying corium occupied by focal lymphocytic infiltrate concentrated about hair follicles and sweat glands. A few epithelioid cells were also present. The appearance of the biopsy was nonspecific. The Kahn reaction was negative. A roentgenogram of the chest was normal.

DISCUSSION

MAJOR EDWIN K. CHUNG-HOON, M.C., A.U.S.: This patient does not have what are considered the minimum diagnostic criteria for leprosy. There is no thermal or tactile anesthesia; there are no demonstrable organisms, and although the great auricular nerves can be seen and felt with ease, they are not nodulated and they do not seem enlarged.

DR. HAROLD M. JOHNSON: It occurs to me that this might be lupus erythematosus profundus.

Lichen Nitidus. Presented by DR. HAROLD M. JOHNSON.

J. O., a mail carrier aged 26, noticed small lesions ranging in size from that of a pinhead to that of a

millet seed on the dorsum of the index finger of the right hand and a few scattered papules on the dorsum of the fingers on the left hand. They have increased in number but not in size during the last six months. There has not been associated itching or pain. There is no family history of tuberculosis.

The epidermis showed moderate acanthosis. The most striking feature was the presence of four sharply outlined cellular accumulations within the epidermis. These were composed chiefly of lymphocytes, although some epithelioid cells were also present, as well as giant cells. The biopsy was diagnostic of lichen nitidus. Treatment with bismuth subsalicylate has been started; only two injections have been given.

DISCUSSION

CAPT. L. H. ROSENTHAL, M.C., A.U.S.: I suggest the same treatment as is used for lichen planus, the administration of a bismuth compound and an arsenical. The prognosis is good.

LIEUT. COMDR. M. SILVERMAN, MC-V(S), U.S.N.R.: I believe that it is generally felt that this disease is a variant of lichen planus.

Tuberculosis Verrucosa Cutis. Presented by DR. HAROLD M. JOHNSON.

T. H., a dressmaker aged 34, was accidentally injured fifteen years ago by a foreign object which entered the medial part of her foot. The lesion broke down and drained for several months. It gradually healed, with a slight warty growth remaining at the site of the initial lesion. During the last fifteen years there has been a slow progression of the lesion over the dorsum of the foot. There has been no pain, only a mild itching at times.

Clinically, the patient presents a soft warty verrucous lesion on the base of the right big toe, extending in a linear growth to the dorsum and base of the middle toe. There is also a semiverrucous lesion along the mesial and plantar surface of the foot. A slight erythema at the periphery of the lesion is seen. There are also scars of an old healed lesion. No lesions are demonstrable on any other part of the body.

Biopsy suggested the diagnosis of tuberculosis verrucosa cutis. A roentgenogram of the chest was normal except for a mild hilar thickening; the reaction to a tuberculin patch test was negative. The sedimentation rate was 30 mm. in sixty seconds. The Kahn reaction was negative.

DISCUSSION

MAJOR GERARD DE OREO, M.C., A.U.S.: I suggest treating this patient by thorough curettage, followed by the rubbing of potassium permanganate crystals into the wounds.

CAPT. HERBERT LAWRENCE, M.C., A.U.S.: Some one suggested the possibility of treatment with injections of starch. I have tried this in a number of cases of this disease, with uniformly unsuccessful results.

Granuloma Annulare. Presented by DR. HAROLD M. JOHNSON.

M. F., a 55 year old white housewife, presented small pale papules on the dorsum of the left hand and fingers, which had been present for a year and a half. There had been a gradual increase in the size of the lesions. They were later removed surgically and biopsy performed, after which two lesions appeared on the interdigital web on the dorsum of the hand at the base of the index and middle fingers. There was no pruritus or pain and no other lesions on the rest of the body. There was no family history of tuberculosis or of any chronic infectious disease.

The patient when seen by me had small infiltrated lesions of moderate redness. There was some central involution and peripheral induration of the primary nodules. There were also lesions that were crescentic or ringlike. Roentgen ray therapy had been given by a radiologist for tinea circinata.

Biopsy showed the corium to be occupied by irregular lesions composed of necrotic centers and epithelioid cell peripheries. The peculiar type of coagulation necrosis and arrangement of the cells were diagnostic. The Kahn reaction was negative. A roentgenogram of the chest was normal. A roentgenogram of the spine revealed osteoarthritic spurs.

DISCUSSION

The members agreed with the diagnosis as presented.

LIEUT. COMDR. M. SILVERMAN, MC-V(S), U.S.N.R.: I suggest the use of solid carbon dioxide with moderate pressure for thirty or forty seconds for the smaller and relatively isolated lesions.

Match Dermatitis on Chest and Secondary and Grease Allergy of Face. Presented by DR. HAROLD M. JOHNSON.

J. N., a 26 year old man, was first seen on April 7, 1944, with erythematous dermatitis localized on his left and his right breast and a similar dermatitis on his chin, eyelids and ears, present for three weeks. The lesions began six months ago around his left breast, and there was itching and burning in that area. Later a similar lesion developed on his right breast about the size of a palm. There has recently been itching and burning of the chin and ears and upper eyelids. He had been treated by a local physician with injections for a "blood disorder" and also for dermatitis from oil and grease.

A patch test with one of the matches carried in his shirt pocket produced a pronounced reaction.

DISCUSSION

The members agreed with the diagnosis as presented.

A Case for Diagnosis (Granuloma Annulare?). Presented by CAPT. HERBERT LAWRENCE, M.C., A.U.S.

A young man states that three months ago he noticed for the first time a thickened area of skin on the radial aspect of the distal half of the right index finger. There has been no change in the appearance of the lesion since it first appeared.

The dorsal border of the lesion is parallel with the dorsum of the finger and blends gradually with the normal skin. On the first knuckle of the middle finger of the right hand there is a flesh-colored papule, 5 mm. in diameter, which is similar in appearance to the lesion on the index finger except that it does not have the callus-like appearance.

Biopsy was unsatisfactory for histologic study.

DISCUSSION

DR. HARRY L. ARNOLD JR.: My diagnosis is granuloma annulare. I suggest that another biopsy be performed.

DR. HAROLD M. JOHNSON: That is my diagnosis, also.

Melanoma. Presented by LIEUT. COMDR. M. SILVERMAN, MC-V(S), U.S.N.R.

C. A. M., a young man, presents a lesion on the side of his nose, which is beginning to show signs of transition from a pigmented mole to a malignant melanoma (nevocarcinoma).

Observation during a hospital stay showed increased activity of the lesion. There has been a recent increase in size; several firm nodules have formed at the upper periphery, and there is a suggestion of activity in the lower periphery.

DISCUSSION

LIEUT. COMDR. M. SILVERMAN, MC-V(S), U.S.N.R.: This patient is to be sent to Memorial Hospital for the Treatment of Cancer and Allied Diseases, in New York, for definitive treatment.

The members agreed with the diagnosis as presented.

Vasomotor Dysfunction Associated with Hypohidrosis. Presented by LIEUT. COMDR. M. SILVERMAN, MC-V(S), U.S.N.R.

O. D. K., a young man, gives a history of an acute eruption on the entire body following any simple effort. After ten minutes of exercise there appears on the entire body an erythematous maculopapular eruption. The lesions are discrete and bright red and itch considerably. He also feels exhausted. This condition has been present all his life but has become greatly aggravated during the past three years.

Examination disclosed diminished secretion of the sweat glands. The patient hardly ever perspires on his face, and he sweats but little on his body, except on exertion.

DISCUSSION

The members agreed with the diagnosis as presented.

Gumma of Palate. Presented by LIEUT. COMDR. M. SILVERMAN, MC-V(S), U.S.N.R.

P. D. G., a young man, was admitted to the hospital on April 30, 1944, complaining of pain and swelling involving the anterior right half of the palate and gums. The lesion was opened and the pus evacuated, with amelioration of symptoms. The primary lesion occurred eleven years ago.

DISCUSSION

DR. HAROLD M. JOHNSON: I am not convinced that this was a gumma. The history of onset not long after the extraction of the upper teeth suggests to me the possibility of its having been a foreign body reaction to something introduced at that time.

CAPT. L. H. ROSENTHAL, M.C., A.U.S.: I am not convinced, either, that this was a gumma.

DR. HARRY L. ARNOLD JR.: Was there any evidence of syphilitic osteomyelitis of the palate?

LIEUT. COMDR. M. SILVERMAN, MC-V(S), U.S.N.R.: No; a roentgenogram showed no osseous involvement.

Granuloma Inguinale. Presented by LIEUT. COMDR. M. SILVERMAN, MC-V(S), U.S.N.R.

J. F. H., a young man, was admitted to the hospital on April 2, 1944, complaining of pain, swelling and ulceration of the inguinal area. The lesions started about four years ago. The patient has been in the hospital several times because of sinuses in the groins, perineum and testicles. At present, he shows lymphadenopathy in the right groin and multiple draining sinuses.

The Kahn reaction was negative. Smears were negative for actinomycetes and acid-fast bacilli. No Donovan inclusion bodies were found.

DISCUSSION

CAPT. HERBERT LAWRENCE, M.C., U.S.A.: I suggest the possibility of hydradenitis suppurativa.

MAJOR GERARD DE OREO, M.C., A.U.S.: There were a number of comedos present to support that diagnosis.

LIEUT. COMDR. M. SILVERMAN, MC-V(S), U.S.N.R.: My associates and I have been unable to find Donovan bodies, but we have had only scrapings to examine, not a biopsy specimen.

News and Comment

COURSE IN TROPICAL DERMATOLOGY

Final Arrangements

As announced previously, a practical course in tropical dermatology will be given in México, D. F., Aug. 6 to 18, 1945, under the auspices of the Sociedad Mexicana de Dermatología and the Facultad de Medicina de la Universidad Nacional, México, D. F. (University of Mexico) and with the cooperation of the Secretaría de Salubridad y Assistencia. This final course has been made up especially for American dermatologists. The subjects listed subsequently will be considered in detail during the two weeks, and the course will include a summary of general information, the presentation of clinical cases and laboratory demonstrations in special fields, such as bacteriology, parasitology, mycology and histopathology.

The Tropical Characteristics of Mexican Dermatology, Dr. Jesús Gonzáles Urueña, Emeritus Professor of Dermatology, University of Mexico.

Pinta, Dr. Salvador González Herrejón. General information; late pinta and experimental pinta, results of modern investigations on the cause of the disease.

Onchocerciasis, Dr. Manuel Martínez Báez. General information; study of subcutaneous nodules and of cutaneous and ocular lesions; parasitologic study.

Syphilis, Dr. Julio Bejarano. Some special characteristics of cutaneous syphilis in Mexico.

Leprosy, Dr. Fernando Latapí. General information; the new Brazilian classification of cases and its practical importance; lepromatous (malignant) leprosy, tuberculoid (benign) leprosy and non-characteristic forms, and so-called Lucio's "spotted" leprosy (lazarine leprosy).

Mycosis, Dr. Antonio González Ochoa. General information; actinomycosis, sporotrichosis, chromomycosis.

Tinea Capitis; Mycologic Data in the Mexican Cases, Dr. Antonio González Ochoa; Treatment of Tinea Capitis with Thallium Acetate, Dr. Fernando Latapí.

Leishmaniasis, Dr. Jorge Millán Gutiérrez. General information; presentation of cases, parasitologic study.

Lymphogranuloma Venereum, Dr. Oswaldo S. Arias. General information; presentation of cases, the Frei test.

Various medical institutions, including the sections of dermatology of several Mexican hospitals, the Institute of Tropical Medicine, the Leprosy Dispensary, under the direction of Dr. Ladislao de la Pascua, and the National Leprosarium, under the direction of Dr. Pedro López, will be visited in connection with these subjects. Possibly the town of Iguala, in the state of Guerrero, will be included, so that many cases of pinta can be observed. Other field trips may be arranged, and additional aspects of tropical dermatology may be considered.

For those who do not understand Spanish, arrangements have been made for presentation of all material in English. A certificate will be presented at the close of this course to each one who has attended the sessions regularly. The fee for this course has been fixed at $50.

For information and applications, address Dr. Fernando Latapí, permanent secretary of the Mexican Dermatologic Society, Zacatecas 220-6, México, D. F., Mexico, or Dr. Leon Goldman, 733 Carew Tower, Cincinnati 2, Ohio.

Those who have made previous applications are urged to complete their travel arrangements and to make their reservations at the Hotel Geneva, México, D. F., at once. Applicants will be notified if any special arrangements for travel are made.

AMERICAN BOARD OF DERMATOLOGY AND SYPHILOLOGY

At the recent meeting of the American Board of Dermatology and Syphilology held in New York city, June 7 to 10, Dr. Howard Fox tendered his resignation as president of the Board. Dr. Fox had been president of the organization since the Board was first organized, in 1932. Dr. C. Guy Lane was elected to membership on the Board to take the place of Dr. Fox and succeeded him as President.

The following forty-two candidates successfully passed their examination and are now specialists certified by the American Board of Dermatology and Syphilology: Robert Linhart Barton, Surgeon (R), U.S.P.H.S., Chicago; John Philip Berger, Wichita, Kan.; Capt. Manuel Gordon Bloom, M. R. C., U.S.A., Houston, Texas; Martin Vincent Boardman, New York; Arturo L. Carrión, San Juan, Puerto Rico; Major Max Harry Cohen, M. C., A.U.S., Augusta, Ga.; Garrett Arthur Cooper, Madison, Wis.; Capt. Frank A. Dolce, M. C., A.U.S., Buffalo; Alfred Eliassow, New York; Jerome Kearney Fisher, New York; LaVerne Edward Gaul, Evansville, Ind.; Joseph Jacob Hallett, Rochester, N. Y.; W. D. Mortimer Harris, New York; Joseph L. Hundley, Surgeon (R), U.S.P.H.S., Jacksonville, Fla.; Capt. Herbert Henry Johnson, M. C., A.U.S., Swannanoa, N. C.; Major Frank Jenness Kendrick, M. C., A.U.S., Gary, Ind.; George Klein, New York; Capt. Herbert Lawrence, M. C., A.U.S., San Francisco; Armond Leo Leibovitz, Surgeon (R), U.S.P.H.S., Hagerstown, Md.; Eugene Lieberthal, Chicago; Max Liebmann, New York; Ludwig W. Loewenstein, New York; Donald John McNairy, Surgeon (R), U.S.P.H.S., Norfolk, Va.; Capt. Theodore Parker Merrick, M. R. C., U. S. A., Wilbraham, Mass.; Lieut. Comdr. Donald Strang Mitchell, Montreal, Canada; Grant Morrow, Ann Arbor, Mich.; Major Lawrence Meier Nelson, M. C., A.U.S., Omaha; David Vermont Omens, Chicago; Alice E. Palmer, Detroit; William Pick, New York; Rees Bynon Rees, San Francisco; Capt. Reuben Max Reifler, M. C. R., U.S.A., Macon, Ga.; Frederick Reiss, New York; Lieut. Joseph F. Ricchuiti (MC), U.S.N.R., Pottsville, Pa.; Lieut. (jg) Edward J. Ringrose (MC), U.S.N.R., Norman, Okla.; Capt. Louis Hudson Rosenthal, M. C., U.S.A., Detroit; Morris Harriss Samitz, Philadelphia; Major Herman Harvey Sawicky, M. C., A.U.S., New York; Francis E. Stone, Houston, Texas; Major Orin Milton Stout,

M. C., A.U.S., Los Angeles; George Merritt Stroud III, Cleveland; Lieut. Wesley W. Wilson, M. C., A.U.S., Tampa, Fla.

The following seven candidates successfully passed their examinations and will be certified as specialists on completion of a five year period devoted to graduate training, study and practice restricted to the specialty of dermatology and syphilology: Joseph Gouvernor Gathings, Houston, Texas; John Nathaniel Grekin, Ann Arbor, Mich.; Winthrope R. Hubler, Cleveland; Arthur Bernard Hyman, New York; Ray O. Noojin, Durham, N. C.; Julius H. Pollock, New York, and Lieut. Philip Sneid, M. C., A.U.S., Staten Island, N. Y.

The time and place of the next examination has not yet been decided. Applications should be sent to the secretary, Dr. George M. Lewis, 66 East Sixty-Sixth Street, New York 21.

DEATHS

Dr. Henry J. F. Wallhauser died on May 5, 1945.

Book Reviews

Doctors at War. Edited by Morris Fishbein, M.D. Price $5. Pp. 418, with 82 illustrations. New York: E. P. Dutton & Co., Inc., 1945.

Armies may successfully prosecute a war without a signal corps, without engineers, without artillery, aviation or cavalry—even without a finance department—but it is said that wars cannot be successfully conducted in the absence of a quartermasters' corps or a medical department. Wars have been lost because of failure of the latter to cope successfully with problems of health of the combatants, failure in transporting of medical supply or in evacuation or inability to combat infection. Until recent years more soldiers died as a result of disease incident to combat than as a result of enemy action.

This book consists of a collection of narratives related by fifteen authoritative medical leaders in the military and naval services and in other agencies responsible for the health of the military and civilian population in wartime. The editor, who in addition to his other duties is Chairman of the Committee on Information of the Division of Medical Sciences of the National Research Council, has written the opening chapter, which contains a succinct consideration of our military medical policy from its development in the early years of the war until it achieved a degree of proficiency hitherto unconceived in this or any other country.

The text is replete with short personal anecdotes of unusual interest, which are sure to appeal to both medical and lay readers. A preamble to each chapter gives a brief biographic sketch of the author, each of whom has been carefully selected on a basis of his ability to present information of genuine value and appeal. Of particular interest is the section on preventive medicine, which relates the various measures taken to forestall epidemics and maintain proper nutrition of the military personnel. Of no less interest is that chapter on surgery which tells the stories of the control of shock, the use of plasma and blood transfusion, the evacuation of the wounded and the miracles wrought by traumatic and by plastic surgery.

The concluding chapters deal with postwar problems, including what the Veterans Administration has to offer the wounded soldier and a history of the National Research Council, past, present and future. Eighty-two photographs, charts and diagrams serve to embellish the text. Without exception, this is one of the most interesting and well edited books to emerge from this war.

The Male Hormone. By Paul de Kruif. Cloth. Price, $2.50. Pp. 243. New York: Harcourt, Brace and Company, Inc., 1945.

This story, allegedly about testosterone, is an autobiography, written in the breezy, entertaining style of the author. The medical profession has already been treated to a review of this book (*J. A. M. A.* **128**:316 [May 26] 1945). This reviewer cannot take the "scientific" aspects of the book too seriously. He has been more touched by what has been happening to the author these past few years (male climacteric) and is happy for him that medical science has shown him the way out. We are all happy that this Boswell of hunters in medical science has caught his second wind and that from now on hunting will be more fun than tough "to unearth the skeletons in scientific closets and find out and tell where scientific bodies are buried and report the crimes of character assassination practiced by political doctors."

Surely dermatologists should have a kindly feeling for this chap. Recently, he sent us thousands of cases of dermatophytosis (remember camphor and phenol?). It is quite possible that cardiologists will be the beneficiaries of this story on testosterone.

But seriously, for the moment, I want the author to ponder this: Man's greatest need today is not for more and sustained vital energy but for a strengthening of the ethical and religious directives that will channel human energy toward the goal of a better world. Political economists are ominously hinting of a world revolution that is or is in the making. Nazi Germany revealed, to the astonishment of all, the veneer that is culture on a bestiality that one must sadly confess still possesses man. Into this maelstrom of uncontrolled forces the author wants to throw his "TNT." Unquestionably, most of the testosterone bombs will be duds, but not all.

In spite of this author's huntings, syphilis cannot be cured in one day nor ringworm with camphor and phenol.

Directory of Dermatologic Societies *

INTERNATIONAL

Tenth International Congress of Dermatology and Syphilology

Oliver S. Ormsby, President, 25 E. Washington St., Chicago.
Paul A. O'Leary, Secretary-General, 102–2d Ave. S. W., Rochester, Minn.
Place: New York. Time: Postponed indefinitely.

Pan American Medical Association, Section of Dermatology and Syphilology

J. J. Eller, President, 745–5th Ave., New York.
Austin W. Cheever, Secretary, 464 Beacon St., Boston.

FOREIGN

British Association of Dermatology and Syphilology (Canadian Branch)

G. S. Williamson, 263 McLaren St., Ottawa, Ontario.
S. E. Grimes, Secretary-Treasurer, Medical Arts Bldg., Ottawa, Ontario.

Royal Society of Medicine, Section of Dermatology

A. C. Roxburgh, President, 121 Harley St., London, W. 1, England.
E. W. Prosser Thomas, Secretary, 27 Selwyn Court, Church Road, Richmond, Surrey, England.

Sociedad Mexicana de Dermatología

Jorge Millán Gutiérrez, President, Mexico, Mexico.
Pedro Daniel Martínez, Secretary, Zacatecas 220-6, Mexico, Mexico.

NATIONAL

American Medical Association, Scientific Assembly, Section on Dermatology and Syphilology

Clyde L. Cummer, Chairman, 1422 Euclid Ave., Cleveland.
Nelson P. Anderson, Secretary, 2007 Wilshire Blvd., Los Angeles.

American Academy of Dermatology and Syphilology

George M. MacKee, President, 999–5th Ave., New York.
Earl D. Osborne, Secretary, 471 Delaware Ave., Buffalo, N. Y.

American Board of Dermatology and Syphilology

Howard Fox, President, 140 E. 54th St., New York.
George M. Lewis, Secretary-Treasurer, 66 E. 66th St., New York.

American Dermatological Association

Fred D. Weidman, President, Medical Laboratories, University of Pennsylvania, Philadelphia.
Harry R. Foerster, Secretary, 208 E. Wisconsin Ave., Milwaukee.

Society for Investigative Dermatology

Henry E. Michelson, President, 715 Medical Arts Bldg., Minneapolis.
S. William Becker, Secretary, 55 E. Washington St., Chicago 2.

SECTIONAL

Central States Dermatological Association

Frank R. Menagh, President, Henry Ford Hospital, Detroit.
C. E. Reyner, Secretary-Treasurer, Henry Ford Hospital, Detroit.
Place: Detroit, 1945.

Hawaii Dermatological Society

James T. Wayson, President, Territorial Office Bldg., Honolulu.
Harry L. Arnold Jr., Secretary, 881 Young St., Honolulu.

Mississippi Valley Dermatological Society

Lawrence C. Goldberg, Secretary-Treasurer, 623 Doctors Bldg., Cincinnati.
Place: Chicago.

New England Dermatological Society

Jacob H. Swartz, President, 371 Commonwealth Ave., Boston.
Francis M. Thurmon, Secretary, 520 Commonwealth Ave., Boston.

Northern New Jersey Dermatological Society

John Kiley, President, 94 Park St., Montclair.
Henry Abel, Secretary, 339 Union Ave., Elizabeth.
Place: Academy of Medicine of Northern New Jersey, Newark. Time: Third Tuesday of March, April, October and December.

Southeastern Dermatological Association

Howard Hailey, Chairman, 107 Doctors Bldg., Atlanta, Ga.
A. H. Lancaster, Secretary, P. O. Box 585, Knoxville, Tenn.

Southern Medical Association, Section on Dermatology and Syphilology

Clinton W. Lane, Chairman, Metropolitan Bldg., St. Louis, Mo.
Francis A. Ellis, Secretary, 8 E. Madison St., Baltimore.

Southwestern Dermatological Society

Louis Jekel, President, Professional Bldg., Phoenix, Ariz.
George K. Rogers, Secretary, Grunow Memorial, Phoenix, Ariz.

STATE

California Medical Association, Scientific Assembly, Dermatology and Syphilology Section

Irving R. Bancroft, Chairman, 1052 W. 6th St., Los Angeles.
Chris Halloran, Secretary, 1052 W. 6th St., Los Angeles.

Connecticut State Medical Society, Section on Dermatology

Harry Bailey, Chairman, 242 Trumbull St., Hartford.
Louis O'Brasky, Secretary, 1172 Chapel St., New Haven.

* Secretaries of dermatologic societies are requested to furnish the information necessary for the editor to make this list complete and to keep it up to date.

Florida Society of Dermatology and Syphilology

J. Frank Wilson, Chairman, 415 Greenleaf Bldg., Jacksonville, Fla.

Wesley W. Wilson, Secretary, 322 Citizen's Bldg., Tampa, Fla.

Louisiana Dermatological Society

M. T. Van Studdiford, President, 912 Pere Marquette Bldg., New Orleans.

R. A. Oriol, Secretary-Treasurer, 921 Canal St., New Orleans.

Massachusetts Medical Society, Section on Dermatology and Syphilology

John G. Downing, President, 520 Commonwealth Ave., Boston.

G. Marshall Crawford, Secretary, 1101 Beacon St., Boston.

Medical Society of the State of New York, Section on Dermatology and Syphilology

C. H. Peachey, Chairman, 197 S. Goodman St., Rochester, N. Y.

E. W. Abramowitz, Secretary, 853–7th Ave., New York.

Medical Society of the State of Pennsylvania, Section on Dermatology

Bernhard A. Goldmann, Chairman, 500 Penn Ave., Pittsburgh.

M. A. Pettler, Secretary, 1319–8th Ave., Beaver Falls.

Michigan State Medical Society, Section on Dermatology and Syphilology

Kenneth Moore, Chairman, 1613 Union Industrial Bank Bldg., Flint.

Ruth Herrick, Secretary, 26 Sheldon Ave. S.E., Grand Rapids 2.

Minnesota Dermatological Society

S. E. Sweitzer, President, 825 Nicollet Ave., Minneapolis.

Harry A. Cumming, Secretary-Treasurer, 419 Medical Arts Bldg., Minneapolis.

Time: First Friday in January, April, July and October.

Oklahoma State Dermatological Society

John H. Lamb Jr., President, Medical Arts Bldg., Oklahoma City.

M. M. Wickham, Secretary, 716 W. Symmes St., Norman.

Texas Dermatological Society

J. Lewis Pipkin, President, 705 E. Houston St., San Antonio.

Duncan O. Poth, Secretary-Treasurer, 414 Navarro St., San Antonio.

LOCAL

Baltimore-Washington Dermatological Society

Isaac R. Pels, Chairman, 1010 St. Paul St., Baltimore.

Leon Ginsburg, Secretary-Treasurer, 1800 N. Charles St., Baltimore.

Place: Alternate cities. Time: Third Thursday of each month.

Bronx Dermatological Society

David Bloom, President, 135 E. 50th St., New York.

Henry Silver, Secretary, 290 West End Ave., New York.

Time: Fourth Thursday of each month from October to May, inclusive.

Brooklyn Dermatological Society

David M. Davidson, President, 1589 Ocean Ave., Brooklyn.

Nathan Pensky, Secretary, 2069-85th St., Brooklyn.

Time: Third Monday of each month except June, July, August and September.

Buffalo-Rochester Dermatological Society

James W. Jordon, President, 471 Delaware Ave., Buffalo.

Frank A. Dolce, Secretary-Treasurer, 468 Delaware Ave., Buffalo.

Central New York Dermatological Society

Albert Van Vranken, President, 1565 Union St., Schenectady.

Maxwell C. Snider, Secretary, 106 Oak St., Binghampton.

Chicago Dermatological Society

Frederick R. Schmidt, President, 122 S. Michigan Blvd., Chicago 3.

Marcus R. Caro, Secretary-Treasurer, 25 E. Washington St., Chicago.

Cincinnati Society of Dermatology and Syphilology

Harry L. Claasen, President, Provident Bank Bldg., Cincinnati 2.

R. G. Senour, Secretary-Treasurer, 937 Carew Tower, Cincinnati 2.

Place: Cincinnati. Time: First Wednesday of each month, except July, August and September.

Cleveland Dermatological Society

Harley A. Haynes, President, 175 S. Main St., Akron, Ohio.

G. W. Binkley, Secretary, 10515 Carnegie Ave., Cleveland.

Time: Fourth Thursday of each month from September to May, inclusive.

Detroit Dermatological Society

Harther L. Keim, President, 1110 Eaton Tower, Detroit 26.

C. E. Reyner, Secretary-Treasurer, Henry Ford Hospital, Detroit 2.

Kansas City (Mo.) Dermatological Society

C. C. Dennie, President, 1103 Grand Ave., Kansas City.

Thomas B. Hall, Secretary, 902 Professional Bldg., Kansas City.

Los Angeles Dermatological Society

A. Fletcher Hall, President, 710 Wilshire Blvd., Santa Monica, Calif.

Clement E. Counter, Secretary, 117 E. 8th St., Long Beach, Calif.

Time: Second Tuesday of each month, October to May, inclusive.

Manhattan Dermatologic Society

George M. Lewis, Chairman, 66 E. 66th St., New York.

Wilbert Sachs, Secretary, 6 E. 85th St., New York.

Metropolitan Dermatological Society

James Lowry Miller, President, 371 Park Ave., New York 22.

Leslie P. Barker, Secretary, 120 E. 75th St., New York.

Montreal Dermatological Society

Paul Poirier, President, 456 Sherbrooke St. E., Montreal, Canada.

Alphonse Bernier, Secretary, 3995 St. Denis St., Montreal.

New York Academy of Medicine, Section of Dermatology and Syphilis

Harry C. Saunders, Chairman, 159 W. 87th St., New York.

Frank Vero, Secretary, 1070 Park Ave., New York.

New York Dermatological Society

H. J. Schwartz, President, 100 Central Park W., New York.

George C. Andrews, Secretary-Treasurer, 115 E. 61st St., New York.

Omaha Dermatological Society

Donald J. Wilson, President, 1113 Medical Arts Bldg., Omaha.

Leonard J. Owen, Secretary-Treasurer, 954 Stuart Bldg. Lincoln, Neb.

Philadelphia Dermatological Society

Carmen C. Thomas, Chairman, 1930 Chestnut St., Philadelphia.

Reuben Friedman, Secretary, 877 N. 6th St., Philadelphia.

Time: Third Friday of every month except June, July and August.

Pittsburgh Dermatological Society

M. F. Pettler, President, 1319–8th Ave., Beaver Falls, Pa.

Frederick Amshel, Secretary, 3401 Fifth Ave., Pittsburgh.

Time: Third Thursday of every month except July and August.

St. Louis Dermatological Society

Clinton W. Lane, President, Metropolitan Bldg., St. Louis.

Joseph Grindon Jr., Secretary-Treasurer, 323 Lister Bldg., St. Louis.

Place: Barnard Free Skin and Cancer Hospital.

Time: 8 p. m., third Monday of each month.

San Francisco Dermatological Society

Arne E. Ingels, President, 490 Post St., San Francisco.

Ervin Epstein, Secretary-Treasurer, 1904 Franklin St., Oakland, Calif.

Time: Third Friday of February, April, September and November.

An Invitation to Hear the Brilliant Radio Program

"THE DOCTOR FIGHTS"

Every Tuesday with Guest Stars of Stage and Screen

A dramatic program dedicated to America's physicians. Presenting recent outstanding achievements of doctors both overseas and on the homefront.

Tuesday Evenings... Columbia Broadcasting System
9:30 EWT ... 8:30 CWT
7:30 MWT ... 6:30 PWT

PENICILLIUM NOTATUM

Product of nature uncontrolled...

PENICILLIN SCHENLEY

Product of nature precision-controlled

THE production of pyrogen-free penicillin for the medical profession today is dependent upon the most *rigid* control science can devise.

Precision control at every step in the production of Penicillin Schenley insures unvarying purity of product . . . and means you can specify Penicillin Schenley with utmost confidence.

SCHENLEY LABORATORIES, INC.

Producers of **PENICILLIN** *Schenley* • Executive Offices: 350 Fifth Avenue, N.Y.C.

SANITIZE THE SKIN

with the modern sulfated-oil cutaneous detergent, to avoid the possible aggravation of symptoms known to occur when soap is used.

PREFERRED BECAUSE

★ it has the same physiologic pH as skin.

★ it contains high-molecular-weight fatty acids, known to be non-irritating.

★ it completely emulsifies skin soil, without lather, and being water-miscible, rinses off easily with any kind of water.

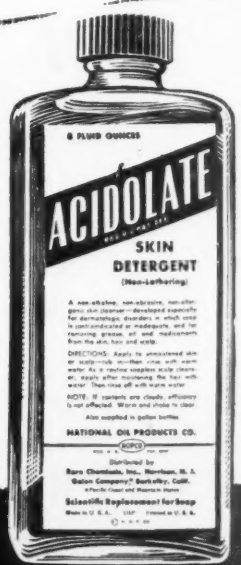
★ it is non-abrasive, non-alkaline, pigment and perfume free.

INDICATIONS

1. Detergent in dermatologic disease . . . 2. Detergent for soap-irritable skin . . . 3. Removal of excessive natural and residual medicinal oil and grease from skin, scalp, and hair . . . 4. Soapless surgical scrub-up . . . 5. Management of acne vulgaris.

Distributed for NATIONAL OIL PRODUCTS CO. *by*
RARE CHEMICALS, INC., Harrison, N. J.

In the Pacific and Mountain States area by
GALEN COMPANY, Berkeley 2, California



671

ACIDOLATE
FOR CONDITIONS BENEFITED BY A SOAPLESS REGIMEN

COSMETICS FOR

Sensitive Skins

SENSITIVE skins require cosmetics which are hypo-allergenic. To produce cosmetics suitable for delicate and allergenic skins, known allergens must be removed or reduced to tenable minimums.

Marcelle hypo-allergenic Cosmetics are especially formulated to meet this requirement. Ingredients used in compounding these cosmetics are carefully tested for sensitizers and the entire manufacturing process is controlled by skilled chemists.

Physicians have been prescribing Marcelle hypo-allergenic Cosmetics for 13 years in cases of skin sensitivity and for their allergic patients. Acceptable for advertising in publications of the American Medical Association.

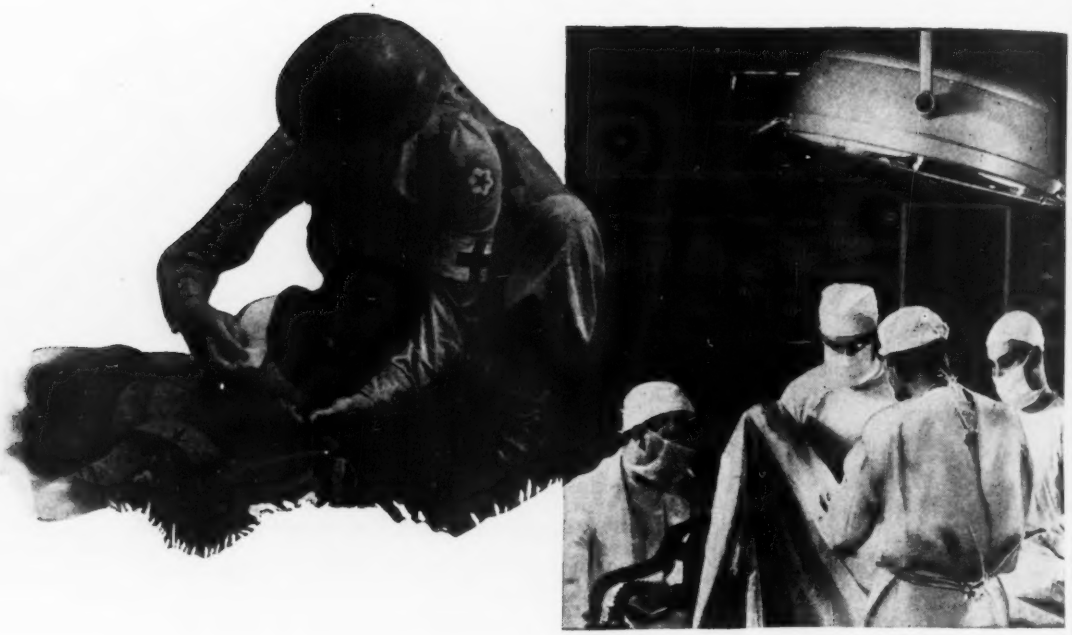
☆ Write for a brochure on the manufacturing procedure in the Marcelle laboratory.

MARCELLE COSMETICS, Inc.

1741 N. Western Ave. . . Chicago 47, Illinois

SERVING ON ALL FRONTS

SULFANILAMIDE
SULFAPYRIDINE
SULFATHIAZOLE



SULFANILAMIDE and its derivatives are rendering vital wartime service on all fronts. On fields of battle, as well as on the home front, these compounds provide the physician with remarkably potent weapons with which to combat wound infection and a wide variety of infectious diseases.

THIS GROUP OF COMPOUNDS IS EFFECTIVE AGAINST INFECTIONS PRODUCED BY:

Hemolytic Streptococci — **Friedländer's Bacilli**
Pneumococci — **Gonococci**
Staphylococci — **Meningococci**
Escherichia Coli

Lymphogranuloma Venereum
Certain Urinary Tract Infections • Trachoma • Chancroid

LITERATURE ON REQUEST

ARMY E NAVY
Speed the Victory with War Bonds

MERCK & CO., Inc. *Manufacturing Chemists* **RAHWAY, N. J.**

pHisoderm

REG. U. S. PAT. OFF.

A MODERN SOAPLESS SUDSING DETERGENT EMULSION
AN EFFECTIVE, NON-IRRITATING, SPEEDY, SURGICAL SCRUB FOR DOCTOR, PATIENT AND NURSE

Advantages of pHisoderm

1. pHisoderm contains no fatty-acids, alkali, color or perfume, approximately 40 per cent more surface-active and speedier than soap.

2. pHisoderm makes an abundant lather in hard as well as soft water and under acid, neutral or alkaline conditions and at any temperature. It is active in cold sea-water.

3. pHisoderm is non-irritating, non-toxic and hypo-allergenic. It is an unusually effective, safe, rapid cleanser of the skin, scalp and hair of infants and adults.

4. pHisoderm is indicated for use by physicians as well as patients whose skins do not tolerate the use of soap.

Supplied in 2 oz. and 8 oz. bottles and in 3 oz. refillable ejector dispensers.

An oily type is available for those who have abnormally dry skin.

Treadle dispensers of special design are required for hospital use and are available.

We invite requests for samples and literature

FAIRCHILD BROTHERS AND FOSTER

70-76 Laight Street New York 13, N. Y.

HYGEIA

Lengthens Your Shadow

Promotes understanding and cooperation of your patients.

Combats the flow of inaccurate health information from unreliable sources.

Exposes quackery and "sure cures."

Tells the fascinating story of medical achievement in lay language.

Supports the vital physical fitness program.

NOBODY recognizes the limitations of one man's capacity better than the hard-working, day-and-night duty physicians who are carrying the load at home these days.

"It can't be done" is a phrase that probably never passes the lips of these stanch campaigners, yet in his heart every one of them knows there is important work that inevitably *does not get done.* Needed counsel for mothers... a word to the wise for the overworked man in middle life... wholesome hints on conservation of vision, digestive health, mental outlook... *You simply can't do it all*—but you can

turn the supplementary jobs over to HYGEIA. **Call in that wholesome, reliable, interesting layman's magazine—edited by your own Association. Keep it always available in your reception room. Send a few judicious gift subscriptions to friends and patients. Refer patients to its helpful, common sense articles. Utilize HYGEIA in its most important role—to lengthen your own friendly shadow... to extend your own influence to the many *extra* places it is so urgently needed today.**

HYGEIA **THE HEALTH MAGAZINE OF THE AMERICAN MEDICAL ASSOCIATION**

535 North Dearborn Street, Chicago 10, Illinois

Surveys show that nearly 2 million waiting patients read HYGEIA every month in doctors' offices. You, too, can share in the results. . . . One year's subscription to HYGEIA, $2.50—two years, $4.00.

Cosmetic allergy

NO RESPECTER OF "SEASON"

Unlike the "hay fever" victim who dreads only the approach of the "pollen season"—the patient afflicted with cosmetic allergy is exposed to offending allergens all year round. Unless, of course, her physician assists her in the management of this common sensitivity by prescribing Hypoallergenic Cosmetics of fine quality—such as ALMAY. • The result of years of highly specialized research and experimentation, ALMAY Hypoallergenic Cosmetics include not only the "essential" cosmetics such as lipstick, face powder and rouge, but cold cream, astringent, hand cream, mascara, soap, etc. • To help overcome the difficult problem of *hyperallergic* patients, ALMAY offers Raw Material and Clinical Testing Sets, and cooperates with the physician in developing "personalized" cosmetics for such cases.

Write for FREE copies of "Cosmetic Sensitivity", "Cosmetic Formulary"; and "Beauty Aids by Almay" (for the consumer)

***The* ALMAY**
Raw Material Testing Set
and Clinical Testing Set

ALMAY
COSMETICS

ALMAY, INC., 56 COOPER SQUARE. NEW YORK 3, N. Y.
Sole Distributors: **Schieffelin & Co.,** New York 3, N. Y.

DIFCO

Detection of the Gonococcus

The remarkable efficiency of the cultural method for diagnosis of gonococcal infections has established the superior accuracy of this procedure over the microscopic technic.

Bacto-Proteose No. 3 Agar, enriched with an autoclaved solution of Bacto-Hemoglobin to form chocolate agar, is recommended for the cultural detection of **Neisseria gonorrhoeae.**

Proteose-Peptone No. 3, the essential nutriment in Bacto-Proteose No. 3 Agar, is recommended for use with sodium chloride as the diluent for suspending the exudate prior to inoculation on plates of chocolate agar.

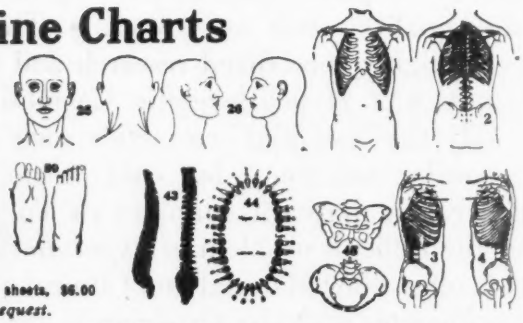
Bacto-Hemoglobin is the preferred enrichment for use in chocolate agar. It is readily soluble in water and is sterilizable in the autoclave.

Specify "DIFCO"
THE TRADE NAME OF THE PIONEERS
In the Research and Development of Bacto-Peptone and Dehydrated Culture Media

DIFCO LABORATORIES
INCORPORATED
DETROIT 1, MICHIGAN

Anatomic Outline Charts

A variety of outlines especially adapted for recording wounds, injuries, tumors, physical diagnosis, fractures. Especially useful for teachers, practitioners, students, coroners, medical examiners. Illustrations on good quality paper, size 5½ by 8½. Lesions may be illustrated in ink or colors.



Price, per sheet, 1 cent; 100 sheets, 80 cents; 1,000 sheets, $6.00
Order by number. Complete catalog on request.
AMERICAN MEDICAL ASSOCIATION - 535 North Dearborn Street, Chicago 10

BLACK LIGHTS*

WOOD'S LIGHT

For

- CLINICAL DIAGNOSIS
- MEDICAL PHOTOGRAPHY
- LABORATORY ANALYSIS

All latest models, AC and DC (battery) for office, hospital and home use.

IMMEDIATE DELIVERY

also THERAPEUTIC & BACTERICIDAL FIXTURES
WRITE FOR DESCRIPTIVE LITERATURE

* NOT SOLD THROUGH DEALERS

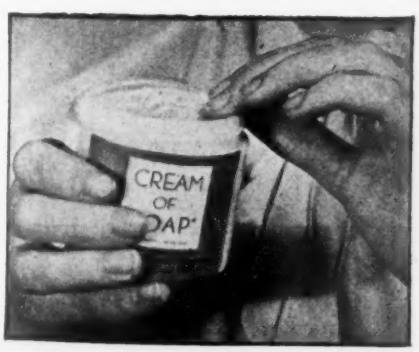
BLACK LIGHT PRODUCTS
Phone SUPerior 3215
450 East Ohio Street Chicago 11, Ill.

Jupiter's Headache

Never before had JUPITER suffered with such a headache. In desperation he summoned the gods to Olympus and tried the remedies they suggested but without relief. Unable longer to bear the racking pain, he commanded his son VULCAN to cleave his head with an axe. Swish! the axe fell and out of JUPITER'S head stepped MINERVA, goddess of wisdom, fully grown, clad in shining armor, and chanting a pean of victory. JUPITER, apparently, had an IDEA.

* * * *

We, too, about 10 years had an idea for a better method of cleaning the skin. CREAM OF SOAP* is that method, and with it, inexpert hands can make the skin clean—quickly, thoroughly, harmlessly. There is no lather to develop. CREAM OF SOAP* is already in colloidal solution. It adsorbs the surface soil when rubbed on the skin, then rinses off completely with cold, hot, soft or hard water. CREAM OF SOAP* is neutral, has no perceptible chemical action on the skin surface, and can be safely used even when the skin is sensitive, irritated or disturbed. Samples gladly sent on request. Personal Luxuries Co., 55 West 16th St., New York 11, N. Y.



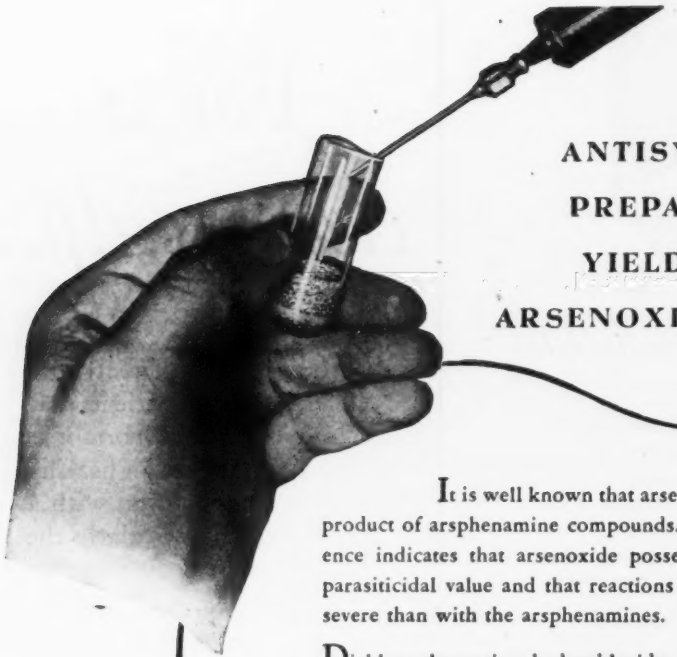
For a clean scalp..

YOU HAVE undoubtedly told many of your patients that a clean scalp is as important as clean hands . . . that a healthy scalp has much to do with a healthy skin, particularly the skin of the face.

Perhaps you have recommended the use of Packers Tar Soap. As a gentle, pleasant and dependable cleansing agent for the scalp and hair, Packers has won the approval of many dermatologists.

Packers also offers the advantage of economy. Shampoos with this famous cake soap average less than a penny—about one-fourth the cost of bottled shampoos.

PACKERS TAR SOAP, INC.
MYSTIC, CONNECTICUT



ANTISYPHILITIC PREPARATION— YIELDS FRESH ARSENOXIDE SOLUTION

It is well known that arsenoxide is the effective end-product of arsphenamine compounds. Extensive clinical experience indicates that arsenoxide possesses a relatively constant parasiticidal value and that reactions following its use are less severe than with the arsphenamines.

Dichlorophenarsine hydrochloride—Winthrop has within its molecule the nucleus for making arsenoxide. With each dose there is incorporated an accurately adjusted amount of anhydrous sodium carbonate, sodium chloride and sugar. The addition of 10 cc. of distilled water instantly yields arsenoxide in isotonic solution (CO_2 escaping in gaseous form). Thus, the physician is assured that *each time in each case* the active antiluetic which he injects is fresh.

All forms of syphilis—primary, secondary, tertiary, congenital—are treated with Dichlorophenarsine hydrochloride—Winthrop.

Booklet containing essential details sent to physicians on request.

How Supplied: Ampuls of 0.045 Gm. and 0.068 Gm., boxes of 10. Ampuls of 0.045 Gm. and 0.068 Gm., boxes of 10 ampuls with 10 ampuls of sterile distilled water (10 cc.). Ampuls of 0.45 Gm. and 0.68 Gm., boxes of 10.

ARMY E NAVY

WINTHROP

DICHLOROPHENARSINE HYDROCHLORIDE

Formerly PHENARSINE HYDROCHLORIDE

Winthrop

CHEMICAL COMPANY, INC.

Pharmaceuticals of merit for the physician

NEW YORK 13, N. Y. • WINDSOR, ONT.